PRACTICAL PHYSIOLOGY.*

Lectures
ON
EXPERIMENTAL PHYSIOLOGY.

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LECTURE VII.

INNERVATION (CONTINUED).

Instruments for operating upon the spinal cord. Apparatus for securing animals.

GENTLEMEN,—When we last met we studied the special functions of nerves, together with the nerve arrangements concerned in reflex actions. The latter subject led us to some considerations regarding the brain and spinal cord. As it is not my intention to show you any further experiments upon the spinal cord, we shall leave the further discussion of its functions to systematic lectures.

The great vaso-motor nerve centre appears, from the researches of Ludwig, Thiry, and Owajannikow, to be situated in the medulla oblongata. From this centre the vaso-motor nerves pass through the spinal cord to all parts of the body. In experiments upon the vascular system it is often necessary to stimulate these nerves. This may be most readily done by means of the induced electrical current. If you propose to do this in the frog, you require a pair of electrodes, made by thrusting two strong sewing-needles through a thick piece of cork, gutta-percha, or sealing-wax, which serves to insulate them as well as to hold them. The needles should be heated, in order that they may readily pierce the sealing-wax or gutta-percha. The needles should be separated from one another by an interval of about a quarter of an inch, and their points should project beyond the gutta-percha to a distance of about a third of an inch. The heads of the needles must be soldered or otherwise joined to wires, in order to transmit the electricity through them. In experiments on rabbits and dogs you require a pair of Ludwig's electrodes (Fig. 19). Each electrode consists of a cylinder of ivory (B) in which an ordinary gimlet-screw (C) is fixed. The end of this screw, hidden within the ivory, is joined to a little brass tube, which slightly projects from the opposite extremity of the ivory. A brass stopper (A), with a wire attached to it, is pushed into the brass tube when it is proposed to send the electricity through the screw (C). When you desire to use these electrodes, make an incision along the spinous processes of the vertebræ, and then either simply screw the electrode through the vertebral lamina into the cord, or lay bare the cord and screw the electrode through it into the subjacent body of a vertebra, in order to fix it firmly *in situ*. The ivory of the electrode serves not only as a handle, but also in some measure to insulate the screw from the muscles of the back. Of course the electrical current is not by such instruments localised to the spinal cord. Nevertheless, they answer well enough the end for which they were intended.

For various purposes it is sometimes necessary to divide the lateral half of the spinal cord, or medulla oblongata. This may be readily done by thrusting a knife, grooved on one side, into the posterior median fissure. The grooved surface is of course turned towards the side of the cord to be cut across. The division of the cord is effected by thrusting a second knife down the groove upon the first, and cutting outwards. I show you two forms of this grooved knife. (Figs. 20 and 21.) One of these (Fig. 20) has, in the hands of Brown-Séquard, done good service to physiology. It is simply a flattened blade with a groove (*b*) on one surface.

* See note at close of lecture.

The other knife which I show you (Fig. 21) is Ludwig's. It is very much smaller than Brown-Séquard's. This renders it inconvenient to handle; but, on the other hand,

FIG. 19. FIG. 20. FIG. 21.

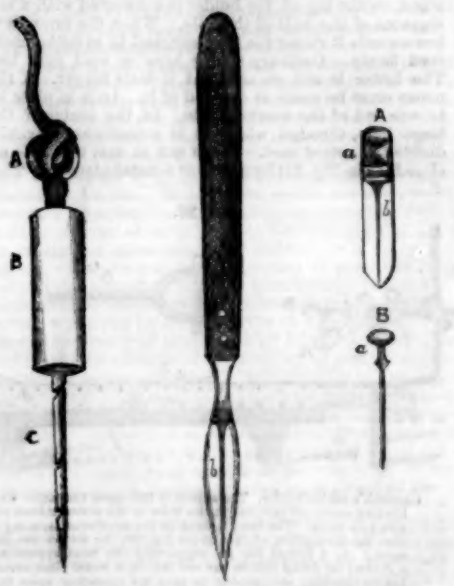


FIG. 19: One of Ludwig's electrodes for stimulating the spinal cord of a dog or rabbit. C, Screw electrode. B, Ivory handle. A, Wire. (Exact size.)
FIG. 20: Brown-Séquard's grooved knife for division of the spinal cord. *b*, Vertical groove on one surface. (Reduced one third.)
FIG. 21: Ludwig's grooved knife for dividing the spinal cord. A, shows the groove (*b*); B is a profile view. The neck (*a*) is flattened, in order that the knife may be held in a pair of scissors. (Twice the real size.)

when once it is placed in the spinal cord it can be left there without being held by the hand until you desire to make the section. In introducing the knife, it is most convenient to hold its flattened neck (*a*) by means of a pair of strong forceps.

In all those experiments where the brain or spinal cord is to be cut or otherwise injured, one must, in every case where it is possible, afterwards harden the nerve-tissue, and then subject sections of it to microscopic examination, in order to ascertain the precise seat and extent of the lesion.

[The cerebrum was then removed from a pigeon, and the well-known effects of this lesion were pointed out. From another pigeon the cerebellum was removed, and the result of the lesion commented upon.

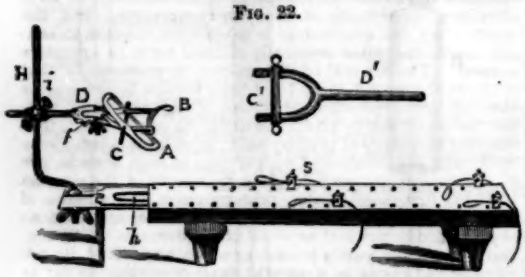
The trunk of the cervical sympathetic was then divided in a white rabbit, and the effects of this lesion upon the vascularity and temperature of the ear, the size of the pupil, &c., were observed and explained. The effect of irritating the cranial end of the nerve was also shown. It is thought unnecessary to detail here the performance of these experiments, or to comment upon their results.]

You will see some other experiments upon the nervous system when we come to study the circulation and respiration. I close to-day's demonstration by alluding to the modes in which animals may be secured for the purposes of experiment

It is not difficult to fix frogs. One requires nothing more than a plate of cork or a piece of pasteboard 8 in. by 4 in. The animal may be held by threads passed round the fingers and toes, and fixed in slits in the pasteboard. It is of course much more difficult to secure a rabbit, a cat, or a dog. For a guinea-pig, rabbit, cat, or small dog the ingenious apparatus (Fig. 22) invented by Czermak answers admirably. It consists of a small wooden table, with numerous holes near its margin, through which cords or

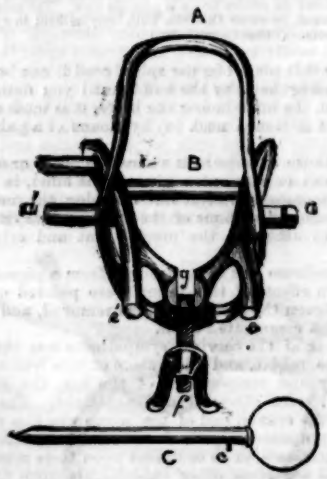
tapes for securing the legs of the animal may be passed and tied to the board; or the cords may be more conveniently fastened by passing them through brass holders (B) fixed above the sides of the board. Each holder is perforated by a hole, through which the cord is passed. The screw on the top of the holder is connected with a movable segment of the wall of the hole. When the screw is turned homewards it raises the segment, and in so doing clasps the cord firmly. Ordinary strong tape or cord may be used. The latter is not so soft, but it lasts longer. A running noose must be made at one end of it. An iron plate is fixed to one end of the wooden table. In the centre of this is a large hole, through which it is sometimes convenient to divide the spinal cord. When not in use, this hole may be closed (as in Fig. 22) by means of a metal plate (k). The head

FIG. 22.



Czermak's rabbit-holder. The animal is laid upon the table. The binding-cords are fastened in the holes or the screw-holders (B) along its sides. The head is fixed in the apparatus (A, B, C, f). (See the description of this under Fig. 23; the letters are the same.) D, A forked bar for supporting the head apparatus. i, Screws for fixing this on the rod (H). A, A metal plate covering an opening; the opening is used for operating upon the spinal cord or back part of the head. D', A forked bar, which is used instead of D when the animal is a dog. C', A bar which goes behind the canine teeth; it is used for dogs instead of the apparatus (A, B, C).

FIG. 23.



Czermak's apparatus for holding the head of a rabbit, &c. A, Bar which fits over the superior maxillary and nasal bones. B, Bar which is placed under the lower jaw. C, An iron pin which is placed behind the incisor teeth. It is held in position by being pushed through holes in the processes a and a'. A little tooth (c) passes into a slit in a, and secures the rod. The jaws are placed between A and B, and are closed by screwing f so as to approximate A to B. g, Slit into which the screw f passes. c and c', Two processes which fit into holes in the end of a forked rod (D, Fig. 22).

of the animal is fixed in a sort of vice. This is secured in a forked holder (D), the handle of which is supported by a vertical iron rod (H). The apparatus for holding the head of a rabbit, cat, or guinea-pig (Figs. 23 and 24) consists of two curved iron bars (A and B), which are placed, one (A) over the upper, the other (B) under the lower jaw. The two bars are articulated one with the other, so as to form a

FIG. 24.

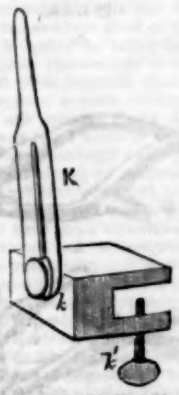
A, The superior maxillary bar. B, The inferior maxillary bar of Czermak's rabbit-holder. The bar B passes within the bar A (see Fig. 23); the holes b and b' passing over the perforated processes at a and a'. The screw f passes into the slit g. c and c' are referred to under Fig. 23. (The letters are the same as in Figs. 22 and 23.)

figure like that of the letter X. The jaws come between two extremities of the X, and are firmly clasped by these, owing to their other ends being approximated by means of a screw (f). An iron pin (C, Fig. 23) is passed behind the incisor teeth, and, as long as the jaws are kept closed, this effectually prevents the withdrawal of the head from the apparatus. When the apparatus is applied, the pin (C, Figs. 22 and 23) should be withdrawn, and the bars (A and B) put over the jaws. Before the jaws are compressed by the screw (f), the pin (C) should be pushed through (a and a') behind the incisor teeth; after which the jaws must be firmly closed by bringing the screw f into the slit g, and turning the head of the screw so as to compress the jaws. The portions of the bars which press upon the jaws should be covered with thick india-rubber to equalise the pressure. For even small dogs the apparatus for securing the head is neither large enough nor strong enough. In these cases an apparatus for fixing the head suggested by my friend Dr. Lauder Brunton answers well. It consists of an iron bar (C', Fig. 22) which is placed across the mouth behind the canine teeth. The mouth is closed by strapping or tying the jaws together before and behind the bar; and the head is held in position by fixing the bar (C') to the forked bar (D', Fig. 22), which is inserted into the screw (i) upon the upright pillar (H). Large dogs may be secured upon Bernard's operating table. This consists of four long boards perforated with numerous holes, and joined together by hinges, so as to resemble an inverted W (M). The dog is laid in the trough in the centre. An ordinary table, however, answers well enough. The head of the dog may be readily secured by placing a wooden or iron bar, similar to that just described (C', Fig. 22), across the mouth behind the canine teeth. It should have a hole in either end. The head is held in position by passing tapes or cords through the holes in the ends of the bar, and securing them to the table. It is always well to lay such animals as rabbits and guinea-pigs upon cushions. These may be made of vulcanised india-rubber, stuffed with horsehair. In addition to contributing to the comfort of the animal, they prevent movement to a very considerable extent.

It is often necessary to place near the animal some support, to hold, e. g., a tube for artificial respiration, or one connected with a canula in an artery, &c. When Czermak's table is employed this support may be readily given in any position by screwing to any part along the side of the table a block (k, Fig. 25) which bears an upright metal rod (K). The rod has in its lower part a long slit, and is fixed to the block (k) by means of a screw passed through the slit. The slit permits of the rod being secured at any convenient

height. A pair of forceps or other apparatus suitable for securing objects may be connected with the head of the rod (K).

FIG. 25.



Apparatus which may be fixed to the table of Czermak's rabbit-holder by means of a screw (k'). K, an iron rod, fixed by a screw to a wooden block (k). Forceps and other apparatus are attached to the head of the rod (K).

Note.—As some readers may be puzzled to know why these lectures are headed Practical Physiology, it may be well to explain that I have for some years been teaching Practical Physiology on the following plan:—The class is divided into three sections—I. Practical Histology; II. Practical, Physiological, and Pathological Chemistry; and III. Experimental Physiology. In Section I. every student works with his microscope. He demonstrates, draws, describes, and mounts the various tissues of the body. In Section II. he performs the qualitative analyses of most of the fluids and solids of the body, together with the quantitative analyses of the urine. In Section III. he merely assists me in performing experiments such as those detailed in these lectures. Section III., therefore, chiefly consists of demonstrations made by the teacher with the aid of the students. The teaching in this section is, of course, not *practical* in the truest sense of that term. Some are inclined to advise that in experimental physiology every student should perform all the experiments. I have to some extent tried this, but was compelled to abandon it. It is impracticable, and for various reasons unadvisable. As far as I am aware it is not a mode of teaching experimental physiology adopted in any school in Europe. I think we do enough if we show students how to perform physiological experiments, and afterwards superintend and guide the attempts of the few who may desire to undertake any research with a view to discover new facts.—W. R.

A CONTRIBUTION TO THE

SURGERY OF BLEEDING VESSELS.

BY ALEX. OGSTON, M.D.

IN a former paper (THE LANCET, April 17th, 1869) I adduced a number of experiments bearing on the subject of the comparative strength of arteries secured by ligature, acupressure, and torsion, from which it appeared that ligature was by far the most secure method, resisting the highest column of mercury (114 inches) brought to bear upon it by the dynamometer, while acupressure and torsion resisted on an average respectively a column of 23·5 and 13 inches. These experiments were criticised at the time by Mr. Lawson Tait, but I still venture to affirm that they give a fair comparison of the value, as far as security goes, of the different methods. Excepting the assumed normal pressure of blood in living vessels, which was, I believe, stated at too high a figure, the only factor omitted by them is that of the elasticity of, and additional security furnished by, the portion of tissue included along with the artery between the pin and wire when acupressure is performed, and which protection accounts for the inner and middle coats of the vessels being, as is alleged, not cut through by this method.

These experiments have not been continued as originally intended. They are sufficient evidence as they stand, and they gave place to a new line of experimentation undertaken with a view to improve upon, or add to, our present methods of arresting bleeding from cut vessels.

That none of our present modes is entirely satisfactory cannot be denied. Torsion seems, in some hands, to have given marvellously good results; but, having had no opportunity of witnessing it as applied regularly to large vessels, I can only say, under liability to correction by those who have tried and adopted it, that the small amount of internal pressure resisted by it forms a serious, although the only, objection to its use. In Aberdeen, on the contrary, we have abundant opportunity of studying acupressure, and the result of my own observation is to convince me that it cannot retain the place originally claimed for it in operative surgery. The one real advantage that it possesses is that it allows the wound to be freed from foreign bodies one or two days after operation—doubtless a very important matter, but which can be attained without its employment. The asserted frequency of primary union in wounds treated here by it, and the absence of suppuration in such wounds, are to a certain extent correct. In amputations of the mamma it yields first-class results, primary union and absence of pus being generally achieved; but in other amputations suppuration occurs just as usual, the statements to the contrary being due partly to the great enthusiasm of its advocates, and partly to a careful nurse removing, as far as possible, all traces of discharge before the visit of the surgeon.

Acupressure has several disadvantages. The pins frequently prevent complete closure of the wound at the time of the operation, and the edges have to be accurately adjusted at a subsequent period. The removal of the wires requires a considerable degree of traction, and, in the employment of the ring-loop, is sometimes a matter of difficulty; while, in at least one recent instance, an acupressed vessel in an amputation wound required, owing to secondary hæmorrhage, the subsequent application of the ligature. The estimate of acupressure I have formed is similar to that of many other surgeons who have given it a trial.

Considering, then, the superior strength of ligatured vessels, it would be a step in advance could the ligatures be applied in such a manner as to retain their superior security, and yet so as to allow of their being removed about the second day after operation, before the tendency to suppuration has commenced in the wound, and also so as to avoid snaring off the ends of the arteries and the tissue grasped by the forceps in the usual mode of applying them.

All these advantages are combined in the method I have now to propose—namely, that the bleeding vessels be secured by the knot depicted in Fig. 1, which, if it be run

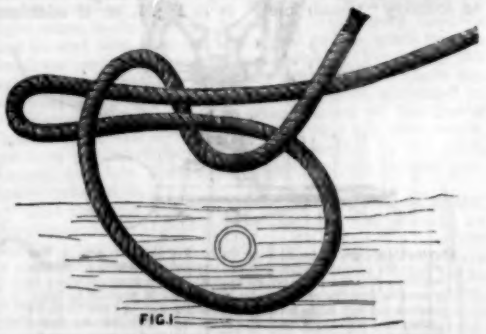


FIG. 1.

close, and the short end be cut off close to the knot, can be removed by very moderate traction on the long end. The knot, it will be perceived, is merely the "thumb or overhand knot," similar to the first part of the knot ordinarily applied to arteries, with the single exception of a loop of the long end being employed instead of the undoubled cord.

Its hold is perfectly sufficient when tied, but I shall afterwards come to discuss its security.

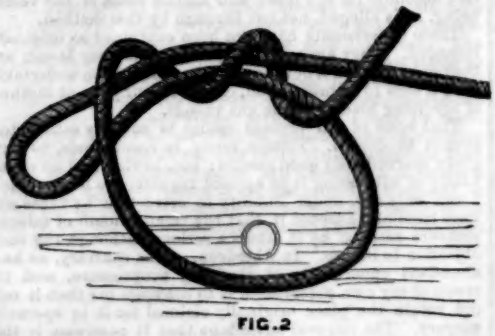


FIG. 2

In applying the knot to the flaps of an amputation wound, the following is the method I have adopted:—A piece of *the strongest* ligature silk, well waxed to diminish the risk of slipping after it has been tied, has one of its ends passed an inch or thereby through the eye of a curved needle. (A few such armed needles are prepared before the operation.) The bleeding vessel being seen, and its course above the orifice estimated, the needle is entered from the raw surface of the flap, a quarter of an inch on one side of the course of the vessel and the same distance above the bleeding orifice; then passed down behind the vessel so as to include it between the needle and the raw surface of the flap; and, having crossed behind the vessel, is brought out a quarter of an inch on the other side of its track. The needle is next drawn through, bringing a couple of inches of the thread with it, as in Fig. 3, and it may then be detached

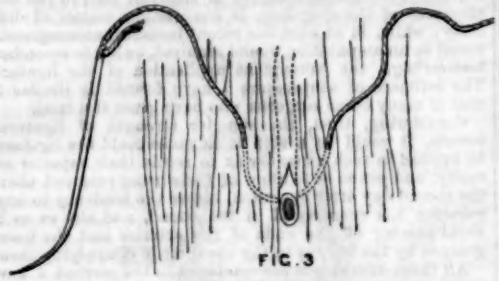


FIG. 3

from the thread. A loop of the long end, an inch or thereby in length, is then used to form, with the single short end, an ordinary "thumb knot," as in Fig. 1, or, if additional

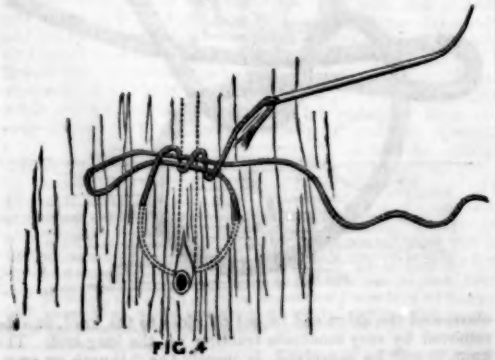


FIG. 4

security is required, a double knot, as in Figs. 2 and 4. The knot is closed upon the vessel and included tissue by traction on the loop and short end; the strands of the loop are placed close to each other, so as to lie in contact throughout and offer no obstacle to removal when the long end is pulled; and, finally, the short end is cut off close to the knot.

Such knots do not slip till traction is made on the long end, which ought to be brought out at the side of the wound next the original point of entry of the needle, and not doubled again over the vessel; and, correspondingly, the loop is laid suitably directed away from the vessel in the direction of the needle when it emerged at the further side of the artery. In small arteries the single knot is amply sufficient; in large arteries I use the double knot for the sake of security. The ligature is removed, on the second day after the operation, by gentle traction on the long end; and the amount of force required for its removal, while too great to be readily effected by accident, is, notwithstanding, less, even with the double knot, than that needed to remove the wire where acupressure has been employed.

The advantages of this proceeding consist in the speedy removal of foreign bodies from the wound, and in the fact that no tissue is compressed or strangled by it save the portion lying in the very knot itself. The distal end of the vessel is still in connexion with the living parts surrounding it, and its nutrition is not interfered with.

The strength of the method is another of its advantages. Vessels experimented upon in the manner given in detail in my former paper, resist, when secured with the single knot, from 24 to 70 inches of mercury; and, on an average, 39 inches of mercury, or a pressure of 19 lb. to the square inch, as against 23·5 inches of mercury with acupressure, and 13 inches with torsion. The double knot resists the full column admitted of by my dynamometer—viz., 114 inches of mercury, or 57 lb. to the square inch. I have tested in animals this application of ligature to cut vessels, and to vessels deligated in continuity, before using it in man, and the results were perfectly satisfactory. In man they have hitherto been equally so. I have at present a stump after Pirogoff's amputation treated in the above way, where the ligatures were removed on the second and third days, and which is healing with as small an amount of discharge as I ever saw obtained, even with acupressure.

The disadvantages are, that, as in acupressure, some tissue is included along with the vessel; and where structures such as important veins and nerves run parallel to the artery, damage might be done by their inclusion. Thus it is best suited for amputations; indeed, without further experience of it, I should hesitate to employ it in the deligation of an artery in continuity upon a human subject. I have had no opportunity of testing it in that most difficult of all vessels to secure, an interosseous artery in the angle of a flap amputation, but believe that, by laying hold of the bleeding orifice and the tissue surrounding it, and then proceeding, as in a flap, to pass the needle behind it through the grasped mass, it would answer as well as the ordinary ligature.

Aberdeen, April, 1871.

TYPHUS IN INDIA.

(A REPLY TO PROFESSOR ROLLESTON.)

By R. T. LYONS,

ASSISTANT-SURGEON, BENGAL MEDICAL SERVICE.

IN an article on "Typhoid or Enteric Fever in Indian Gaols," &c., in THE LANCET of the 7th January last, Dr. Rolleston, commenting on an epidemic of typhus which occurred in the Rawul Pindee gaol in 1869, endeavours to prove that of "the eight cases which were taken (by Dr. De Renzy, the Sanitary Commissioner for the Punjab) as proving conclusively the presence of typhus in India," some were typhoid, the others pulmonary consumption, dysentery, or remittent; and that the epidemic could not have been typhus. I beg to point out that the "eight cases" were not the only evidence on which the Sanitary Commissioner formed his conclusion. A report on the same epidemic furnished by me on the 5th May, 1869, to the Medical Department, which was published in a volume issued in 1869 by

the Inspector-General,* might be supposed to have had some weight with Dr. De Renzy, although he has not explicitly referred to it. Furthermore, Dr. De Renzy personally visited this gaol during the epidemic, and saw many of the sick. The symptoms and progress of the fever as described in my published report, and the facts observed by himself during his visit, might fairly be stated to have assisted him in forming an opinion, which was strengthened and confirmed by the additional light cast on the subject by the "eight cases" which were subsequently reported by Dr. Fairweather for the information of the Sanitary Commissioner.

I should not have intruded upon the discussion of this subject had I not been the writer of the first report on the epidemic of fever, in which I pointed out its distinctive character, and named it "typhus." The fever prevailed during the months of January, February, March, April, and May of that year: 563 cases of typhus occurred (errors excepted), of which 84 were fatal. The greater portion of these cases, I should say very much over 500, were observed by me. I trust that these circumstances will be accepted as my apology for availing myself of the present opportunity for supporting the view—originally declared by me, and accepted as correct after full investigation by Dr. De Renzy, the Sanitary Commissioner, as well as by Dr. Gray, the Inspector-General of Prisons, but deliberately opposed by so eminent an authority as Dr. Rolleston—that the epidemic of fever in the Rawul Pindee gaol in 1869 (as also that in 1867) was typhus, and not enteric or remittent fever.

Dr. Rolleston appears to have the belief that typhus has not existed, that it does not and cannot exist, in India. In fact, I conclude, after reading his preliminary observations, that he is of opinion that typhus in India is a natural or physical impossibility or inconsistency. "There were no authentic records of typhus, such as we see it in this country, having been met with in Asia, Africa, or the tropical parts of America," wrote Dr. Murchison in 1862. If the records of the office of the Inspector-General at Calcutta, which are only now being utilised for the instruction of the profession, were searched, it is not improbable that authentic accounts of typhus would be found that have not yet seen the light. In the *Indian Annals of Medical Science* for 1867, No. 21, page 107, eighteen cases of typhus are noted by Dr. Chuckerbutty, Professor of Clinical Medicine and physician to the Medical College Hospital at Calcutta; and again, so far back as 1864, in No. 18, p. 122, of the same serial, fourteen cases are given in detail by the same gentleman. It is hoped that the present discussion will induce Indian medical officers to come forward with authentic accounts of the occurrence of typhus in various parts of India. I have met three medical officers who informed me that they had seen typhus in the villages and elsewhere on the north-west frontier.

Dr. Rolleston quotes with approval Keith Johnstone's remark that "the geographical and climatic limits of typhus in Europe and America will be found to correspond nearly with those of the glutinous cerealia and potato." This "valuable and suggestive, even though not wholly accurate, remark" does not exclude the Punjab as a seat of typhus; for the many thousands of Europeans and millions of natives who people that province consume as their daily food the wheat and potatoes grown on the soil. The phytographic boundary suggested by Dr. Rolleston—namely, "the northern limit of the Palmaceæ as the southern limit of true typhus," if correct, will certainly exclude the Punjab. For though cocoa-nut, palmyra, and talipot-palms do not grow there, some kinds of palms do. The date-palm, for instance, is met with in more or less abundance all over the Punjab, and a very diminutive palm, about one or two feet in height, grows in profusion on waste lands in the Kohat district and elsewhere on the frontier. But the indisputable existence of typhus in Italy, where also some of the Palmaceæ are found, clearly shows that this boundary is only "partially correct," if not wholly inaccurate. If a botanist could supply a botanical expression for the words "annual isotherm of 68° Fahr.," even that would not necessarily exclude the Punjab, for the mean temperature for six consecutive months is much below this degree of cold,* as Dr. Rolleston may satisfy himself is the case by referring to the meteorological tables printed on p. 93 of the Appendix to Dr. De Renzy's Report. The remark regarding "geographical and phytographical correspondence" in the organic world generally, and between typhus and certain forms of vegetation in particular, is supported by the harmony of these conditions in the Punjab in connexion with the coexistence of typhus and a temperate vegetation. The northern parts of the province are for six months consecutively a quasi-tropical region; for another six consecutive months a temperate region, with a climate that will compare favourably with Italian or any other in Europe. The flora is also of the same double character, being a combination of tropical and temperate vegetation. If palms (not cocoa-nut, palmyra, or talipot, but dates) exist, so do the fir, the poplar, the plane, the willow, the walnut, the apple, pear, apricot, quince, peach, vine, one cherry-tree, the strawberry, the geranium, the honeysuckle, the maiden-hair fern, the red poppy, the buttercup and dandelion as field-weeds, wheat, oats, the clovers, barley, potatoes, carrots, turnips, cabbages, asparagus, thistly artichoke, green peas, the flowering or sweet pea, &c. Even the most cherished of English flowers, the daisy and snowdrop, can be reared with care. Almost every flower or edible vegetable that is cultivated in England can be met with in the gardens of Europeans in the Punjab. I am speaking, not of the hills, but of the plains. On the other hand, purely tropical products, such as the cocoa-nut, the pine-apple, the jack-fruit, the leechee, and others which are common in Calcutta, for instance, are not to be had in the Punjab; not to speak of the luxuriant trees and gorgeously coloured flowers in Calcutta. The climate and vegetation of the Punjab, if I may venture an opinion after a continuous residence of nearly ten years in that province, are by no means incompatible with the existence of typhus; but, on the contrary, are consistent with the fact declared with the assurance of certainty by Dr. de Renzy, that typhus does exist in the province, or at any rate that it does and must occur under the conditions that will generate it in Europe or other temperate regions.

Before proceeding to speak of the "eight cases," it is necessary that I should supply an important omission unhappily made by Drs. De Renzy and Fairweather in their account of the fever. It was with much regret that I remarked the omission in the only account that was likely to reach England, as Dr. Murchison, in page 58 of his work on "Continued Fevers," discredits, in consequence of the same omission, the accuracy of the diagnosis of some of the ablest physicians in India who have recorded cases of typhus. Dr. Rolleston has also manifestly been influenced, quite naturally, by the same omission in forming his views regarding the type of the fever which occurred in the Rawul Pindee Gaol. I have no reason to believe, after my conversations with Drs. De Renzy and Fairweather, that they had doubts regarding the *contagiousness* of the fever, and I conclude that the omission by them of all mention of such a prominent and important character was due to inadvertence. I might, however, refer to the fourth of Dr. Fairweather's eight cases, in the text of which he incidentally remarks that he sent that case out of the gaol to a separate tent in the fever camp "*by way of precaution.*" To supply the omitted proof that the fever was contagious, I quote the following paragraphs from my official report, addressed to Dr. Morton, the Deputy Inspector-General of the Rawul Pindee Circle, who called for it, dated May 5th, 1869, which has been published for general information by Dr. John Murray, the late Inspector-General, in the volume previously referred to.

"That the fever was contagious there can be no doubt. The circumstance that it spread amongst the prisoners, or that the prisoner-attendants on the sick contracted it, might be explained on the general ground that all the residents of the prison, being under the same conditions, were liable to be similarly affected by the same cause of disease, which need not be contagion. The fact, however, that the fever spread to persons not resident in the prison, and whose circumstances or conditions were dissimilar from those of the prisoners, but whose duties brought them into contact with

* A Sketch of the Medical History of the Native Army of Bengal for the year 1868. Compiled in the office of the Inspector-General of Hospitals, Indian Medical Department (Bengal), by Surgeon-Major J. T. C. Ross, F.R.C.S., Officiating Secretary. Appendix (p. iv.): "Fever in the Rawul Pindee Gaol," by Assistant-Surgeon R. T. Lyons.

* Mean temperature of each month in the Rawul Pindee district in 1869: January, 44·90°; February, 45·40°; March, 58·75°; April, 71·10°; May, 89·45°; June, 92·35°; July, 89·90°; August, 88·20°; September, 84·30°; October, 72·00°; November, 59·50°; December, 52·55°.

the prisoners, points very decidedly to the contagious character of the fever. The members of the contingent guard were attacked; many of the police on duty over the prisoners; two native doctors, one of them a freshman recently appointed; the sub-assistant surgeon, also recently appointed; one of the gaolers; and the English writer of the gaol, were successively attacked. Some of the prisoners of the Sohan camp likewise contracted the fever, probably communicated by the officials and guards, although the camp was detached from the fever camp, and a mile distant from the main gaol. Moreover two of my bearers were attacked, one after the other. These men resided night and day in my house. The conclusion is inevitable, that they contracted the fever either directly from me or from brushing my clothes, or from communication with the few prisoners who work on my grounds. I have not been able to gather evidence of the conveyance of the fever by released convicts, or officials who returned to their homes sick, to the villages to which they proceeded."*

And again, in a more advanced part of the same report:—

"In its (the epidemic's) subsequent course the influence and behaviour of contagion on separate bodies of individuals became apparent. The women, for instance, who were not crowded, and whose ward is a detached building, received the contagion. Two or three were attacked. These were separated in one compartment of the ward, and the disease ceased to spread amongst the others. The two separate gangs who were undergoing quarantine in the routine way received the contagion. Three individuals, so far as I remember, became affected after the epidemic had been fully established. Their immediate removal stopped the spread amongst their fellow-residents of the quarantine barracks. But with the main body of the prisoners the separation of the affected had not the effect of stopping the spread of the fever. Too many individuals had imbibed the fever poison generated in the crowded sleeping barracks; the poison was latent and incubating in them, and hence the separation of those in whom the fever had declared itself was not prophylactic to the others."

(To be concluded.)

REMARKS ON A CASE OF

TRANSITION OF THE TESTICLE INTO THE PERINEUM.

BY JAMES E. ADAMS, F.R.C.S.,

SENIOR ASSISTANT-SURGEON TO THE LONDON HOSPITAL.

MY chief reason for bringing this case before the profession is that it is the third in which an operation has been undertaken for placing the gland in its proper position: in two of which the proceeding was accomplished, and the patients died from the effects of the operation; and in the third it was found impossible to complete the operation, and the gland was removed, which affords some argument in favour of leaving the misplaced organ alone during the earlier periods of life.

This case was brought to me at the London Hospital by Mr. T. Richardson, on Jan. 27th of the present year, the child being eleven weeks old. The penis was well formed. The right side of the scrotum was well developed, and contained a healthy testis. There was a distinct raphé, and, on the left side of it, a corrugated pouch exactly like healthy scrotum, but quite empty. The left testicle formed a smooth oval swelling in the perineum, to the left of the middle line, and half an inch in front of the anus. It was quite movable. The cord could not be felt, owing to a considerable thickness of fat.

Knowing that Mr. Curling was interested in these cases, and being anxious to have his opinion on the question of operative interference, I asked him to see the case in consultation. He expressed an opinion in favour of attempting to place the organ in the scrotum; so, with his assistance, I operated in the following manner. I first made an incision, about an inch and a half long, from the external abdominal ring over the empty scrotal pouch, which I carefully opened, thus preparing a bed for the testis. I then felt for the cord, and, having found it, followed it down to the testicle, taking care not to injure the tunica vaginalis. On making traction on the cord, it became apparent that there was some firm adhesion between the lower part of the testicle and the perineal pouch; this Mr. Curling suggested was the gubernaculum. I dissected down to its attachment, and divided it as far from the testicle as possible. I was then able to raise the gland, in its uninjured tunica vaginalis, and lay it in the scrotal pouch; and, to make it more secure in its new position, a catgut suture was passed through the gubernaculum and fixed to the bottom of the scrotum; the wound was then closed.

In order to avoid the additional risk of erysipelas, which was prevalent in the hospital at the time, I attended the child afterwards at the mother's own home, with Mr. Richardson. For the first two days the wound looked healthy, but on the third day the edges became sloughy, and there was a blush of erysipelas down the thighs and over the buttock and loins; it was also apparent that the urine and fæces irritated the wound. The child looked very ill. After this the wound gaped considerably, and there was no attempt at repair; the testicle, in its serous pouch, could be seen lying at the bottom of the sloughy wound. The child lingered on for a fortnight, but without any improvement in the wound, and died apparently exhausted. On examining the part, I found the organ firmly attached to the scrotum by the gubernaculum, and no trace of the suture could be found (satisfactory evidence in favour of catgut sutures). On detaching it and dissecting up the cord to the internal abdominal ring, I found that the funicular portion communicated with the general peritoneal cavity, and that there was a large quantity of purulent-looking fluid in the lower part of the abdominal cavity and in the tunica vaginalis. Hence it seems that death was caused by peritonitis, commencing in the tunica vaginalis and extending upwards.

This case is almost exactly like one described by Mr. Curling, in which he operated, and the child died; but there is no account of any post-mortem. (Vide third edition of Mr. Curling's work on Diseases of the Testicle, p. 53.) Reference is also made to a case of Mr. Partridge's in which he attempted to replace the organ, and, failing, was obliged to excise it. There is in all cases of misplaced testicles a possibility, or even a probability, of the funicular portion of the peritoneum being patent, if not permanently, at least for some time after birth; but in Mr. Partridge's case, which was that of an adult, the serous membrane was closed; and Mr. Ledwich dissected the body of a man thirty-five years of age who had this condition, and in him also it was closed.

The chief arguments adduced in favour of early operation are: 1st, that the scrotum will not develop on the empty side, and that in the course of a few years it will become an impossibility to cover the organ with it; 2nd, that, as nearly all testicles found in abnormal situations are atrophied, there is a chance of the gland itself becoming useless; 3rd, it has been asserted that its position is inconvenient and painful, and that it is liable to injury.

The first of these propositions is undoubtedly true, as in all the cases described as occurring in adults the accounts state that the scrotum was entirely wanting on the side of the misplaced organ. This malposition of the gland seems, in one case at least, to form an exception to the general rule of misplaced testicles becoming atrophied, as the gland in Mr. Ledwich's case was of normal size, and its ducts contained spermatozoa; in Mr. Partridge's case, however, the gland was atrophied. The third proposition is only partially true, for several patients have reached adult life with this malformation, and without any inconvenience. In Mr. Partridge's case the patient, who was twenty-five years of age, was aware of the absence of his testicle from the scrotum and of the swelling in the perineum; but it gave him no trouble until, wishing to become an artilleryman, he found that it prevented his riding, and he therefore consented to its removal.

I am of opinion, therefore, that in these cases no operation should be undertaken during the earlier periods of

* This was a matter that I was very desirous of ascertaining. Dr. Murchison (p. 59, op. cit.) specially mentions the want of evidence of exportation as a reason for disbelieving the contagious quality of the fever in the Agra Gaol in 1861, which I consider to have been relapsing fever, which is very contagious. I had more work on hand than I was able to get through, and had no time to prosecute accurate investigation. Mere hearsay is useless.

life: first, because in very young children the wound must almost necessarily be frequently irritated by the urine, and because of the probability of the patency of the serous membrane and consequent risk of peritonitis; and, secondly, because the malposition may not prove to be of any inconvenience, unless the patient is destined to become an equestrian.

Finsbury-circus, May, 1871.

REPORT OF A CASE OF

CHRONIC OBSTRUCTION OF THE BOWELS, WITH STERCORACEOUS VOMITING, RELIEVED BY THE ADMINISTRATION OF CHLORAL HYDRATE.

BY JOSEPH LAWTON, L.R.C.P. ED., &c.

ON the morning of Nov. 12th, 1870, I was summoned to visit the case of M——. On entering the room, I found the patient lying on her back, with her knees drawn up, and her countenance betraying the keenest anxiety. In less than five minutes she vomited, with such force as to plaster the opposite wall, a large quantity of brown stercoraceous matter. On inquiring into the history of the case, I found that the patient had been confined two months previously, but had not enjoyed a free and easy evacuation for some time, her bowels not having been moved for fourteen days prior to my being called in. Her pulse was feeble, wiry, rapid, and indeed all but imperceptible; the tongue was dry and coated with a brown fur, coloured by stercoraceous matter; the lips were very dry and black; eyes sunken and glassy; and the system was so emaciated that death within a few hours seemed inevitable.

On making a physical examination of the abdomen, I found the seat of pain to be more particularly in the left iliac region, and could detect increased fulness just above this part. The abdomen was greatly distended by tympanites, the linea semilunares being thrown into folds. The urine was scanty and highly charged with lithates. Up to this time aperient medicines had been administered. I put a stop to all these, and gave her twenty-five grains of the chloral hydrate in half an ounce of cold water. The effect was surprising, this being the first fluid she had been able to retain for many days. I then administered an injection, consisting of a quart of gruel, one ounce of turpentine, and one ounce of castor oil: the patient could feel it moving about the supposed part of obstruction. In half an hour part came away with a few scybala. On the following morning patient had slept; pain had abated; pulse stronger; and she was able to keep down a small quantity of soda-water and brandy. The remaining portion of fluid came away with several large scybala. I continued the enemata twice a day for a fortnight, and had the satisfaction each time of bringing away large quantities of hardened feculent matter. The patient continued to improve, and I consider her now well.

While I regard the turpentine as having aroused the peristaltic action of the bowels, yet I must attribute the cessation of the stercoraceous vomiting to the action of the chloral hydrate.

Torquay, Devonshire, April, 1871.

A UNIVERSAL PHARMACOPŒIA FOR THE GERMAN EMPIRE.—A committee of twelve members is to be appointed to frame a Pharmacopœia for the whole of the German confederation. Prussia is to send three members; Saxony, Mecklenburg, and Bavaria each two members; Wirtemberg, Baden, and Hesse each one member. The committee will be empowered to call to their assistance men whose special knowledge may prove useful. It is anticipated that the work will be ready by the 1st of January, 1872.

TRICHINOSIS.—The "Allg. Med. Cent. Zeit." of the 1st inst. states that a gentleman in Berlin, holding an appointment in the Civil Service, died a few days ago from trichinosis. A certain number of people in the neighbourhood of his residence were taken very ill with the same complaint, but recovered. All had partaken of pork sold by one and the same butcher. It is not said whether the meat was boiled or not.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tam aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF STONE IN THE BLADDER; LITHOTOMY; DEATH.

(Under the care of Mr. PAGET.)

As the following is, in all probability, the last case of Mr. Paget's which we shall have the pleasure of publishing in this portion of the journal, we have thought it probable that many of our readers would note with interest the details of the treatment which was pursued under his direction, and have therefore rendered, without abbreviation, the notes forwarded to us by Mr. Young, his house-surgeon.

The patient was a robust, healthy-looking man, who had always been abstemious as regards drink, but had subsisted to a large extent on meat. His pulse was 92, small and regular. It appeared that for the last twenty years he had been suffering from symptoms of stone in the bladder, and that of late they had increased in severity. At the time of admission he was under the necessity of passing water frequently; he suffered pain in the region of the bladder and "shooting" down the thighs; his urine varied considerably as to colour, but was alkaline in reaction, and contained about one-sixth part of albumen, a little pus, a few renal casts, and a large number of triple phosphate crystals.

The operation performed was the lateral; but the stone, which was large, heavy, and almost spherical, was only removed with difficulty, in consequence of its being situated far up in the bladder, which was highly placed in the pelvis, and on account of the unusual depth of the perineum. The wound was at once plugged. A few hours later some sickness came on, which was attributed to the chloroform. At about the same time a little blood was found to escape from the wound, and, on the removal of the plug, two large clots came away. The hæmorrhage was soon overcome by injection of cold water. At midnight the pulse was 112, very small and soft; the respirations were 24. By six o'clock of the following morning the former was 96 and moderately full, and the latter had fallen to 20.

Second day.—The patient slept altogether for about three hours during the night. Urine dribbled constantly from the wound. He complained of excessive thirst and dryness of mouth, and took, from time to time, small quantities of wine and milk and wine and water.

Third day.—Pulse 108, small and weak. Thirst constant. Patient slept a little during the night, and had a slight attack of hiccough. The urine comes freely through the wound. Ordered one ounce of brandy, with milk or beef-tea every hour; lemonade and barley-water with ice to be taken frequently.—7 P.M.: Pulse 112, small and feeble; temperature 99·6° F.; hiccough constant; the abdomen much distended. A grain of opium was given by the mouth, and a poultice laid on the abdomen.—11 P.M.: A quarter of a grain of morphia in solution injected hypodermically.

Fourth day.—Midnight: Patient has slept for half an hour. On awaking he took a tablespoonful of warm brandy-and-water, which immediately brought on a return of hiccough. 1 A.M.: Pulse 112. A quarter of a grain of morphia injected.—3 A.M.: Pulse 104, and weak. Has slept for nearly an hour, and taken altogether four teaspoonfuls of beef-tea and brandy without any return of the hiccough. The morphia injection repeated.— 5 A.M.: Has slept soundly since 3.15. Pulse 108. Has just taken two ounces of brandy-and-water, which has brought on a return of the hiccough. The morphia injection repeated.— 7 A.M.: The patient is soundly asleep.—9 A.M.: Has been awake for three-quarters

of an hour, and has taken some brandy and beef-tea without a return of the hiccough.—Mid-day: Pulse 120; temperature 98·6°; skin moist; thirst continues; abdomen much distended, but little or no pain is felt on pressure.

Fifth day.—The patient feels comfortable, though he has not slept much during the night. Pulse 100, of better volume. An ounce of castor oil, taken yesterday, had opened the bowels.

Sixth day.—Pulse 116, of good volume. He slept during the first part of the night. There has been another attack of hiccough. The urine passes freely through the wound, the surface of which looks dry and sloughy.

Seventh day.—The patient has passed a bad night; he looks anxious. Pulse 120, and small; respirations 35, shallow and irregular; temperature 99·6° F. The urine passes through the wound, which still looks dry and sloughy. Within the last twenty-four hours he has taken about four ounces of brandy, with sago, arrowroot, and milk.—Mid-day: He is unconscious; the pulse is very small and intermittent; respirations shallow and irregular. Death ensued at 3 o'clock.

The following morbid appearances bearing on the case were discovered at the post-mortem examination:—The mesentery and omentum were loaded with fat; no lymph, either old or recent, could be found in the peritoneal cavity. When the knife was passed through the peritoneum into the pelvis, a quantity of pus welled up from a large patch of diffuse cellular inflammation, which extended from the side of the wound backwards to the part behind the rectum. The left kidney was of natural size, pale and soft; the capsule non-adherent; the calices, pelvis, and ureter were dilated, and filled with purulent urine. The right kidney was imbedded in a large quantity of fat, was somewhat smaller than natural, and pale and soft; the calices, pelvis, and ureter were very much dilated; at one spot the capsule was adherent, and the cortical substance was wasted to about the thickness of a line. The liver was large and soft, and broke down under slight pressure. A few small vegetations were found on the cusps of the mitral valve. About a pint of purulent fluid occupied the left pleura. The corresponding lung was compressed, but otherwise healthy.

TWO CASES OF INTESTINAL OBSTRUCTION TREATED BY COLOTOMY.

(Under the care of Mr. SAVORY.)

We are indebted for the following cases to Mr. P. Butler Stoney, house-surgeon:—

CASE 1.—A. W——, a woman fifty-six years of age, was admitted with constipation of six, and vomiting of five days' standing. She suffered every few minutes from severe griping pains, which were relieved by pressure, and stated that the last motions she had passed had been no thicker than her little finger. She had never been the subject of hernia, and, although both the rectum and the vagina were carefully explored with the finger, no evidence of any such affection could be detected. Her abdomen was somewhat distended. Her vomit was not stercoraceous, and consisted of recently-taken food.

On the seventh day of constipation (the day after admission) five grains of calomel with a grain of opium, and an enema consisting of two ounces of gruel and one of castor oil, were administered. The latter brought away a small shred of mucous membrane, but no trace of fæcal matter was voided, and on the following (eighth) day, though there was less vomiting, the tongue was found to be dry and coated with white fur, and the face drawn and slightly thinner. A drachm of sulphate of magnesia, with ten grains of the carbonate, was ordered to be taken in an ounce of spear-mint water every six hours.

The use of this draught was discontinued on the thirteenth day, when a final dose of half an ounce of castor oil was administered. In the meantime no action of the bowels had been obtained, and the vomiting, with an intermission of twenty-four hours, had continued. Gas had been passed daily per anum, the pulse had remained low, and, with the exception of a rise to 102·2° on the ninth day, the temperature had varied between 98·2° and 99·4°.

On the fifteenth day the pulse was 116, weak and thready; the temperature 98·4°. The tongue was thickly coated and very dry, and the patient complained of abdominal pain, which was increased on pressure.

Mr. Savory then took the opinion of his colleagues as to the advisability of performing colotomy, and the side on which the opening should be made. On the latter point there was some difference of opinion, but, as he suspected that the seat of obstruction was somewhere in the colon itself, he decided to operate on the ascending portion. The opening in the gut gave passage to a large quantity of fæcal matter and gas.

On the following day the patient expressed herself as much relieved, though she had not slept much, and was occasionally sick; her temperature was 100°. On the second day after the operation she complained of a return of the abdominal pain, and at three o'clock in the afternoon very aggravated vomiting came on; an hour and a half later a motion was passed through the natural passage, although large quantities of fæces passed through the artificial opening as well. The patient suffered from abdominal pain and vomiting until she died, at eight o'clock. She had taken about eight ounces of brandy since the operation.

Post-mortem examination.—The body was well nourished, the rigor mortis well marked. There was considerable distension of the abdomen, with well-marked tympanites in the flanks. The abdominal cavity contained limpid and flaky puriform lymph; the exposed surfaces of the peritoneum indicated recent acute inflammation. There were no traces of fæcal extravasation. About eight inches above the rectum was found a firm, annular, and apparently malignant stricture of the gut, on either side of which the mucous membrane was considerably thickened and thrown out into fringe-like polypoid projections. Above the stricture, the intestine was much distended with fæcal matter; and, on examination of the small intestine, Peyer's patches were everywhere found to be destroyed, and more or less contracted by old ulceration. Immediately above the ileo-cæcal valve there were several sharply-defined ulcers of about the size of a pin's head. The mucous membrane of the cæcum was much excoriated, and in some places was so thin as to break on the slightest touch. There was some atheroma of the aorta; but all the other organs were healthy.

CASE 2.—This patient was a man, fifty-eight years of age, who stated on admission that his bowels had not acted for more than a fortnight, except after taking aperient medicine, when a small quantity of liquid fæces had passed. The finger discovered that the calibre of the rectum was obstructed by a soft mass on one side of which a small aperture could be felt. An average-sized rectum-tube was therefore introduced and made to convey a quantity of water, which brought away a large amount of fæcal matter. This operation was repeated for six days, when, with the consent of his colleagues, Mr. Savory opened the colon in the left loin, in order that a free exit for the contents of the bowel might be established before the patient's health began to suffer. On the following day the patient felt much better; his pulse was 100, his temperature 99·2°; he had had a good night; and the fæces passed freely through the artificial opening. On the third day he suffered from hiccough, and complained of having had a bad night: twenty grains of chloral were ordered for a night draught. On the twenty-sixth day he was discharged in a good condition.

ST. GEORGE'S HOSPITAL.

REMOVAL OF A CIRCULAR FILM ADHERENT TO THE PUPILLARY MARGIN.

(By Mr. BRUDENELL CARTER.)

AMONGST a number of others, the following operation was performed on the 17th inst. on a child who, up to nine years of age, had enjoyed good sight. One eye then became damaged, and the other destroyed, by quick lime. The patient had also since suffered from keratitis and iritis, which had not been treated, and which there was good reason to believe was due to an inherited syphilitic taint. On admission the damaged eye presented a considerable central opacity of the cornea, and an opaque lens, which was found to be covered anteriorly with a layer of inflammatory lymph, which had become adherent to the margin of the iris. In his first operation, Mr. Carter had performed iridectomy downwards, and withdrawn, by mouth-suction, the damaged lens. The film had, however, remained ad-

herent to the margin of the pupil. Its removal was effected by the operation we witnessed, in the following manner:—Two needles, one of which was provided with a cutting edge, were introduced into points of the margin of the cornea opposite to each other in the transverse line, and so manipulated as to divide the circumferential attachment of the film. In withdrawing the cutting needle, the outer of the two openings into the anterior chamber was enlarged sufficiently to permit of the introduction of a delicately-formed canula forceps, by means of which the unbroken circular film, which was of extreme toughness and quite opaque, was readily withdrawn. It was anticipated that by this means useful vision would be restored to the patient's remaining eye.

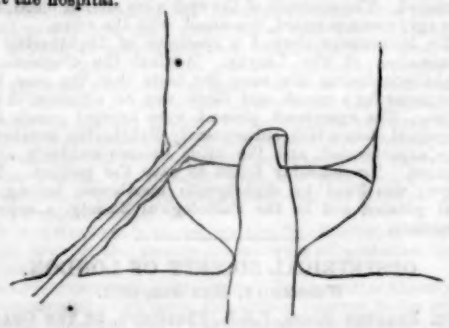
PROVINCIAL HOSPITAL REPORTS.

QUEEN'S HOSPITAL, BIRMINGHAM.

STRICTURE OF RECTUM WITH FISTULA IN ANO; THE STRICTURE AND THE SPHINCTER ANI DIVIDED BY ONE OPERATION.

(Cases under the care of Mr. FURNEAUX JORDAN.)

Emma C——, twenty-nine years old, a married woman, had suffered from rectal symptoms for twelve years. Examination disclosed an annular simple stricture, with an anal fistula, having two openings externally. Four limited incisions were made, bougies having failed to secure any benefit. Then a director was passed along the fistula, and entered the rectum above the stricture. All the parts between the rectum and the director were divided. The recovery was complete. Large solid stools were passed before she left the hospital.



Remarks.—In referring to this case, Mr. Jordan remarked that most rectal diseases, excluding cancer, could as a rule be cured with certainty. The treatment of simple stricture, however, was often unsatisfactory, and sometimes dangerous. The bougie and limited incisions in careful hands had been occasionally fatal. Very probably the extension of inflammatory action from the rectum to the peritoneum was due to the incessant unrest in the sphincter. Simple stricture mostly lies within an inch and a half of the anus. In such cases he should, in future, after making a few very limited radiating incisions, divide the stricture and the sphincter ani, even if no fistula was present. The advantages would be: complete rest, complete division of the stricture at a point most remote from the peritoneum, and ready escape of all inflammatory products.

A CASE OF RETRO-PHARYNGEAL ABSCESS DUE TO CARIES OF THE TEMPORAL BONE.

Mr. Furneaux Jordan remarked that this case was one of great interest, because the common cause of this abscess was caries of the cervical vertebræ.

Sarah P——, aged thirty-four, had been a patient two years before with purulent discharge from the left ear, tenderness over the left mastoid region, and facial paralysis. She rapidly recovered under the influence of a seton at the back of the neck. She now came with slight facial paralysis, decided impairment of the mental faculties, and a retro-pharyngeal abscess. There were none of the well-known indications of atlo-axoidean or other vertebral disease. She was again deriving striking benefit from the nuchal seton. How long the improvement would continue could not be foretold. Nature kept the temporal bone at rest; hence, probably, when carious, it often did well.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 18TH, 1871.

MR. J. COOPER FORSTER, VICE-PRESIDENT, IN THE CHAIR.

Mr. ARNOTT exhibited a specimen of Soft Cancer of the Breast. The patient, from whom the breast had been removed by Mr. Nunn in the Middlesex Hospital, had noticed the tumour for ten months, and latterly it had been growing rapidly. The whole of the breast was occupied by a large smoothly lobulated tumour, with a fluctuating prominence in the centre. The skin was œdematous, the nipple slightly retracted, and there was a moderately enlarged gland in the axilla. But as, in addition to these characters, there was hardly any pain, and as the woman's health remained perfectly unimpaired, it was thought by nearly all to be cystic sarcoma, rather than true cancer. Even after the removal of the mass, this impression was at first confirmed by the naked-eye appearances. A subsequent microscopic examination, however, convinced Mr. Arnott that it was really an example of so-called "firm medullary cancer." Such parts of the tumour as were not spoiled by degenerative changes and blood extravasation were made up of closely crowded, large, irregular cells of varied shape, containing one or more large oval nuclei with bright nucleoli. These cells were contained in the wide meshes of a fine fibroid stroma which pervaded the mass and mapped it out into irregular loculi—as shown in a drawing sent round with the specimen. Apart from the interest attaching to the diagnostic difficulties of the case, Mr. Arnott was anxious to draw attention to the fact that it was one of those examples of cancer which, occupying a mid-position between scirrhus and medullary, serve to prove the real identity of these two forms of the disease. He thought that English pathologists generally laid too great stress upon the distinctive characters of these varieties, even where they were careful to separate the medullary sarcomata from the latter class. Seeing that occasionally, in the hardest scirrhous cancers, nodules of very soft structure were met with, and that the secondary growths of both scirrhus and medullary were apparently quite identical, it seemed more fit that, in using the terms scirrhus and medullary, nothing more should be understood than a difference in consistence, the only real distinction between the histological structure of the two tumours consisting in the proportion of fibrous stroma present. This was in the hardest cancers abundant, and was proportionately less as the firmness of the tumour diminished, this distinction being probably mainly dependent upon rapidity of growth.

Dr. MURCHISON brought forward a specimen showing a fistulous communication between the gall-bladder and the colon, and taken from a woman who died in Middlesex Hospital from epithelial cancer. In this case no doubt gall-stones had passed by a short cut into the gut without passing along the ordinary route, so as to produce jaundice. Generally speaking, when communication existed between the gall-bladder and the gut, it was the small intestine which was concerned. There were symptoms of old disease in the gall-bladder.

Dr. FAGGE referred to a similar case in Guy's museum.

Dr. DUCKWORTH exhibited a Gall-stone which had passed through the umbilicus of a patient who had never exhibited signs of jaundice. The stone had probably made its way through the fundus of the gall-bladder.

Dr. MURCHISON showed a specimen of Acute Atrophy of the Liver, in association with gall-stones, taken from a case of great clinical interest. The patient was a man aged sixty-six, admitted into hospital last October, and who died in a month afterwards. On admission, the man was jaundiced, caused by the passage of a gall-stone, as was evidenced by the antecedent symptoms. In a few days the man

became drowsy, and fell into a typhoid state, his tongue being brown and dry, and his mind wandering. Then succeeded acute delirium and hiccough, his jaundice lessened, and bile passed per anum. The question was as to the diagnosis between cerebral mischief, pyæmia, and acute atrophy. The urine was found to contain tyrosine, and the quantity increased, whilst the patient became worse, and died of convulsions. At first the temperature increased, but it was normal, or rather below the normal standard, some days before he died. Dr. Murchison leaned, in consequence of the state of the urine and the temperature, in his diagnosis towards acute atrophy. At the post-mortem the bile-ducts were dilated, and the orifice into the duodenum enlarged, whilst the gall-bladder contained stones. The liver was in an early stage of acute atrophy, and there were small pyæmic deposits in the lungs and liver.

Dr. CRISP asked whether, in the first case reported by Dr. Murchison, the gall-stones were in the common duct or the gall-bladder, because one would expect to find the communication between the duct and the intestines, as being the more common.

Dr. MURCHISON said he mostly found, in cases of communication between the gall-bladder and the intestines, that the fistulous opening existed at the fundus of the former.

Dr. DICKINSON remarked that, in his belief, in cases of so-called spontaneous pyæmia the real cause of the disease was some internal mischief, such as the passage of, and changes connected with, gall-stones or renal calculi. He mentioned a case in illustration of the passage of the latter being connected with pyæmic symptoms resembling those of acute rheumatism.

Dr. MURCHISON said that he had pointed out such cases as those mentioned by Dr. Dickinson, and he had brought forward cases of pyæmia associated with ulcer of the stomach and ulcerative endocarditis; but in these cases there was something more than mere irritation present, and he believed some ulceration must be present for the production of pyæmia.

Dr. CRISP exhibited an Aneurism of the Coronary Artery taken from the body of a man aged sixty-three, who lost an enormous quantity of blood in two or three days, and who died suddenly, nothing during life in the way of physical signs pointing to the existence of the aneurism. The opening whence the blood came was not detected. The pericardium was full of blood; the arteries were atheromatous. The man ascribed the origin of his disease to a blow received twenty years before.

Mr. SYDNEY JONES asked if there were any communication between the coronary artery of the stomach and the latter organ, because that was often overlooked.

Dr. CRISP replied that the mucous surface of the organ was intact; and, in reply to Dr. Douglas Powell, said that when excited there was cardiac distress, and the pulse was weak; and, in reply to Dr. Wiltshire, that the liver was healthy.

Dr. CHURCH could not understand how a blow could produce aneurism of the coronary artery.

Mr. GEORGE LAWSON exhibited the Hand of a boy which he had removed in consequence of the whole of the integuments, back and front, having been torn completely away, and turned back like a glove "inside outwards," as far as the tips of the fingers, exposing the tendons, and in connexion with crushing of some of the joints. The boy was feeding a machine with paper, and his hand got caught betwixt the rollers.

Mr. HULKE agreed as to the desirableness of amputation in the case.

Mr. COOPER FORSTER remarked that in the case of a large skin wound occurring in a child it was quite right to sacrifice a limb, if necessary, in order to avoid tetanus and other serious consequences.

Mr. T. SMITH exhibited a specimen of Cystic Disease of the Breast with an old Cancer, which had in part undergone calcareous degeneration, removed from a patient belonging to a very cancerous family. The cyst sprang from the side of the cancer.

In reply to Mr. HULKE, Mr. SMITH said that the glands near were not enlarged, and that under the microscope the typical characters of cancer were observable in the growth.

Mr. SYDNEY JONES, remarking on the non-enlargement of the glands, said he should be glad if the tumour were referred to the Committee on Morbid Growths, and this was done.

Mr. MORRIS exhibited a specimen of Medullary Sarcoma of the Tibia, removed from a boy under Mr. De Morgan's care. The growth had been growing for about three months; it was accompanied by pain, and was the size of an orange. On section it looked like medullary cancer. It was, however, of periosteal origin, surrounded the shaft of the tibia, but was separated from the epiphysis by the cartilage, and was made up of soft brain-like material, yielding a milky juice, and exhibiting under the microscope small round cells with granular contents, a few having nuclei, there being also some fine fibrillæ, but no true cancer cells.

Dr. PAYNE said he hoped the growth would be referred to the Committee, because this sarcoma-like cancer is histologically interesting and of obscure growth, and in the present case presented one feature of special interest—the absence of nuclei.

Mr. MORRIS also exhibited a Venous Tumour of the Brain from a man aged thirty-eight, admitted under Dr. Goodfellow's care at the Middlesex Hospital. At fourteen years of age he had been knocked down, and was subsequently epileptic for thirteen years, a fit coming on every four or five weeks. He had been lately a hard drinker, and was sexually incapacitated. On the 2nd of April he was as well as usual, then drank hard, and had a fit, during which time his eyes protruded greatly; the fits recurred and he became unconscious. On the 5th of April he was at work, and was there seized with delirium, became unconscious, and died in twenty-four hours. At the post-mortem the arachnoid was found to be congested and its veins varicose. In the right hemisphere was a vascular mass made up of a congeries of varicose veins, and attached to it was a large cyst surrounded by softened brain, but microscopically unchanged. The contents of the cyst were altered blood, and the cyst communicated, it seemed, with the veins.

Dr. MURCHISON showed a specimen of Diphtheritic Inflammation of the Larynx. Against the diagnosis of diphtheria during life were the facts that the man had symptoms for a month and there was no albumen in the urine. The symptoms present were croupal cough and laryngeal obstruction, subsequently diphtheritic membrane was expectorated, and the urine became suddenly albuminous. Tracheotomy failed to save the patient. The larynx was lined by diphtheritic membrane, having, as first pointed out in the Pathological Society, a cellular structure.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 3RD, 1871.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

EDWARD MARTIN, Esq., Weston-super-Mare, was elected a Fellow of the Society.

Mr. FEDLER exhibited the Pelvis of a woman the subject of mollities ossium. She was an inmate of the West Riding Asylum for four years, and died there last January. The pelvis was much distorted, and its diameters greatly contracted. A chemical analysis of the bone proved it to consist of—water 24·74, fatty and oily matters 26·49, true bone 48·77. The inorganic matter was present in exceedingly small quantities, forming only 23·71 per cent. of the true bone.

Dr. PROTHEROE SMITH exhibited the Uterus and its Appendages, removed from a patient upon whom he had performed ovariotomy. The pedicle and the uterus were free from inflammation, yet the patient died from acute peritonitis of the small intestines, which were found inflated, inflamed, and covered with recent lymph. In explanation of this anomalous condition, he said that, after tabulating a large number of cases from the published records of Mr. Spencer Wells and others, and on taking a statistical view of such as had terminated unfavourably, he had found a large majority had succumbed in consequence of inflammation resulting in the formation of lymph or the effusion of serum or blood into the peritoneal cavity. He had also remarked, in a large number of cases operated upon, vomiting of fluid in excess of that taken, and, if protracted, becoming grumous; and that hæmoptysis, hæmatemesis and bloody motions, hæmaturia, and albuminuria not unfrequently

took place. Such morbid conditions were, he thought, due, in long-standing cases especially, to an effort to relieve the vascular system, which, in the progress of the ovarian malady, had contracted the habit of depletion by effusion into the cyst, which was suddenly arrested by ovariotomy. On these grounds he begged to call attention to a previous treatment which, if judiciously practised, he believed would tend materially to obviate the fatal issue of ovariotomy —viz., bloodletting; first, as a means of removing cysto-peritonitis when diagnosed before the operation, and, secondly, as a prophylactic measure to prevent its occurrence afterwards.

Mr. SQUIRE said that precedent peritonitis need not prevent good recovery after the removal of an ovarian tumour was shown in a case lately under his care. The patient had vomited blood on more than one occasion, and had also passed blood by the bowel before the operation. He considered that dependence upon the effect of bloodletting before an operation was at least hazardous.

Dr. WILTSHIRE thought that bleeding might, in certain selected cases, prove beneficial, and related a case of his own which appeared confirmatory of this view.

Dr. BARNES exhibited Mr. De Berdt Hovell's Uterine Truss, for preventing and arresting post-partum hæmorrhage. It has a spring pressing, with a force of about seven pounds, a pad down upon the uterus. It is admirably adapted to support that organ, and to relieve the practitioner from the fatigue of grasping it. It stimulates to contraction by sustained elastic pressure.

Dr. BARNES also communicated (for Mr. Porter, of Lindfield) the particulars of a case in which the fœtus died at the third month of gestation, and was expelled piecemeal, but the placenta was retained to about the full term, and was then expelled undecomposed.

The PRESIDENT communicated (for Mr. H. Gibbons, of Wolverhampton) a case of Cæsarean Section. The patient, aged twenty-two, was a dwarf, three feet ten inches high. An incision six inches long was made into the uterus, and the fœtus extracted. The placenta was found attached to the posterior wall, and was peeled off without much bleeding. The uterus contracted rapidly under the eye, and its wound was thereby closed. Uncontrollable vomiting commenced in about an hour, and continued, with scarcely any intermission, till she sank, forty hours after the operation. There was no extravasation into the perineum, nor any peritonitis. The pelvis was exhibited to the Society. The child lived nine days.

A case was then read, reported by Mr. ROUTH, in which a child born in the twenty-second week of gestation lived eighteen days.

Dr. WILTSHIRE read a paper on "Tetanus after Abortion." After narrating two cases, the author referred to the great mental depression under which the patients laboured, owing to trouble and anguish of mind, and suggested that, although peripheral physical changes were justly regarded as most important factors in the production of tetanus, functional disturbances of the cerebro-spinal centre should be studied in conjunction with them. Illustrations were given of the disease termed tetany, and reference was made to the recent pathological researches of Clifford Allbutt, Lockhart Clarke, and Dickinson. The question of treatment was then briefly discussed.

Dr. PLAYFAIR thought the rarity of tetanus after labour and abortion was chiefly a climatic question, and he doubted its being proportionately more rare than after surgical operations. In countries in which tetanus was common, it was far from being a rare event after labour, and he had seen many cases at Calcutta.

Dr. MEADOWS then read a paper on "Uterine Hæmatocele"; and on the motion of Dr. BARNES, seconded by Dr. PHILLIPS, the discussion thereon was postponed to the next meeting.

TESTIMONIAL TO MR. BEADLES.—About forty of the old friends and patients of Mr. Beadles, of Broadway, Worcestershire, have presented him with a testimonial on the occasion of his retiring from practice, and leaving the parish after a residence of forty-two years. The present consisted of a handsome timepiece and silver salver. It must be grateful to Mr. Beadles to have forty years of medical duty thus recognised by forty appreciative friends.

Reviews and Notices of Books.

Companion to the last Edition of the British Pharmacopœia; comparing the Strength of its various Preparations with those of the London, Edinburgh, Dublin, United States, and other Foreign Pharmacopœias, &c. By PETER SQUIRE, F.L.S., Chemist on the Establishment of the Queen, &c. Eighth Edition. London: J. and A. Churchill. 1871.—We praised the fifth edition of this excellent work; and the present reprint—the eighth edition—merits still higher encomium. The number of pages is increased from 324 to 397; and this augmentation of size affords a far greater amount of valuable and instructive information than is represented by the additional leaves. The tables of the materia medica derived from the organic kingdom, inserted at the commencement, will be extremely useful to students; and the brief detail of the various spas of Europe, with classification of mineral waters, added at the end of the book, will be very convenient to practitioners who cannot spare time to refer to the original monograms on this subject. There is a list of the American eclectic remedies, giving the popular names, action, and dose of each article. The account of the mode of preparation and properties of some remedial agents is new and interesting; as, for instance, the outline of the process for preparing hydrate of chloral (p. 85), for which, the author states, he is indebted to his son, William S. Squire, Ph.D., who, he believes, is the only maker of this preparation in England. All new medicines up to the latest date are given. These non-officinal preparations have been inserted from time to time in successive editions, which, by the way, appear to have been very rapidly exhausted; 2000 copies of the sixth edition having been disposed of in seven months, and 3000 of the seventh edition having been sold in eighteen months.

Select Methods in Chemical Analysis (chiefly Inorganic). By WM. CROOKES, F.R.S., &c., Editor of the *Chemical News* and of the *Quarterly Journal of Science*. London: Longmans. 1871.—Mr. Crookes tells us, in the Preface to his book, that he has tested most of the new methods of analysis which have appeared in the *Chemical News* during the last twelve years, and that he has thought it useful to republish a selection of the most valuable of them, with such additions or variations as his experience has suggested. We cordially approve his judgment. The book so produced is, of course, somewhat fragmentary. Methods described in well-known handbooks, such as Fresenius', are very properly omitted, and the chemist, in looking over the pages, will be apt to regret the absence of not a few valuable processes which he has seen in the "Zeitschrift," or in the all-embracing "Jahresbericht." But it would have been impossible to include all. The author has given us a very useful volume, and it is, after all, no small praise to say that our chief regret is that it is not much larger. We hope Mr. Crookes will be induced to follow up his book with another devoted to proximate organic analysis. No satisfactory work has yet appeared on the subject. Numberless useful papers are scattered through the journals, and a well-arranged selection of them would be of great value to chemists, manufacturers, medical practitioners, and all others to whom chemical analysis is of importance.

The Fourth Georgic of Virgil. Translated into English Verse, by R. M. MILLINGTON, M.A. Longmans. 1870.—*The Georgics of Virgil.* Translated by R. D. BLACKMORE, M.A. Coll. Exon. Oxon., Author of "Lorna Doone," &c. Sampson Low, Son, and Marston. 1871.—We classify these elegantly bound little volumes in the order, not of merit, but of time. Had Mr. Millington waited till Mr. Blackmore's translation appeared, he might have spared himself

the trouble of producing his own; if indeed the irregularly felicitous versions of Dryden, Sotheby, and Sewell, should not already have warned him off the ground. His scholarship is not unequal to his enterprise; but he wants the first requisite of the versifier—ear. For example:

"And he, they say,
For seven whole months beneath some tall cliff lay,
By lonely Strymon plaining, and his woe's
Sad story chaunting in the cold grottoes."

Mr. Blackmore (we need hardly say of the author of "Lorna Doone") is a man of genius—genius refined and strengthened by full and fond communion with the antique masters. His pursuit (or pastime shall we call it?) is that of cultivating the "kindly fruits of the earth"; and though he does not claim to be one "whose talk is of bullocks," or even of bees, his knowledge of the four great themes of the Georgics is much deeper than that of the mere classical scholar. Besides, he has a true ear for metrical movement and a true taste in the language of poetry, as the reader will at once recognise in his treatment of the famous episodes of the second and fourth books. His translation of at once the most scientific and most finished poem in Latin literature is the best we have seen; and, if read along with Dr. Daubeny's lectures on "Roman Agriculture," will form a delightful study to those of the profession who care to make or to renew acquaintance with the genius who, of all others in antiquity, was the most proficient in medicine.

The Playground of Europe. By LESLIE STEPHENS, late President of the Alpine Club. London: Longmans, Green, and Co. 1871.—This volume is a collection, with certain additions and alterations, of articles which have appeared in *Fraser's Magazine*, the publications of the Alpine Club, and in the *Cornhill Magazine*. It is very pleasant reading, and contains a good deal of anecdote and incident. The author makes no pretence whatever to science. He is evidently of the muscular Christian school, and seems to think all enjoyment insignificant compared to climbing mountains and glaciers. Invalids who do not possess the power, and men of easy habit and portly mien, who lack our author's enthusiasm and his wind, will be disgusted to find there is so much exertion and hard work connected with "The Playground of Europe."

A Tabular History and Analysis of all the undoubted Cases of Typhoid and Typhus Fever treated at the Boston City Hospital from 1864 *to* 1869. By J. BAXTER UPHAM, A.M., M.D., late Visiting Physician to the Hospital. Boston, U.S., 1870.—This pamphlet is very industriously and laboriously compiled, and the expression "in condensed form" used by the author in the first sentence of the work is hardly applicable to ninety-three pages of closely printed matter, most of which is tabular. Our American brethren are remarkable for great skill and industry in the compilation of facts, and, as we had occasion to remark from personal inspection some eighteen months ago, are running us hard in systematising and utilising scientific material. But they fall into the natural error of failing to condense their work sufficiently, and so cause searchers after truth to wade through columns of statistics in order to discover a fact pertinent to the subject in which they are engaged. These remarks apply particularly to this work, but we cannot on that account fail to accord it a moderate meed of praise.

Street's Indian and Colonial Mercantile Directory for 1871. London: G. Street, Cornhill; Street Brothers, Serle-street, W.C. 1871.—We gladly call attention to this Directory, for it supplies a want that has been much felt. In addition to the trade returns, tariffs, populations, &c., the volume gives short descriptions of each country and town, with the principal products, and tables of local weights and measures; also full particulars (with rates and times of transit) of the steam and other communications with various places, as well as the usual time of transit of sailing-vessels, and average rates of passage money. The work contains the names and addresses of medical men practising in India and in our various colonies. The collection and compilation of the information necessary for such a book must have involved considerable labour and outlay, and the publishers deserve much credit for its production, as it cannot fail to be of use to a large and increasing number of persons in this country and abroad.

Medical and Surgical Examination Papers. Arranged by H. AUBREY HUSBAND, M.B. London: Longmans.—There is a certain art in passing a good examination. A man may have the requisite knowledge without having acquired the tact of arranging it in a clear and didactic form. This is chiefly done by writing out answers to the questions which form the basis of all examinations, and Mr. Husband has collected a series of such questions, which, if carefully and correctly answered, would enable any student to pass his examination with credit and success.

Sewage Irrigation: a Lecture. By W. HOPE, Esq., V.C., delivered to the Ratepayers of West Derby, Liverpool. London: Stanford.—Mr. Hope's lecture can scarcely be too generally read. He points out with the authority of great experience the true principles upon which sewage irrigation must be conducted. He combats the chief objections which have been urged against it from a sanitary point of view; and that his arguments have been successful in inducing the West Derby people to adopt sewage irrigation is a tribute alike to his intelligent advocacy and their common sense.

PRESERVED VEGETABLES.

WE are frequently requested to examine and report upon various kinds of preserved food, and most of our readers are more or less acquainted with some forms of fish, flesh, fowl, and vegetable material of this sort that they have eaten, or tried to eat, with a very small degree of satisfaction. Many of us remember the dinners that have been given at the Cannon-street Hotel, and elsewhere, to prepare which cooks of the genus Francatelli were employed, and the result of which was, of course, highly pleasing and very congratulatory to the promoters. But some of the latter evidently forgot that in endeavouring to persuade the denizens of Whitechapel and the New Cut, or the sailors of our mercantile marine, to eat this provender, they had made no arrangements for a supply of skilled cooks, and that therefore their laudable efforts to cheapen food for the million were not likely to meet with more than a very small modicum of success. Many meats and vegetables prepared and preserved with great skill can command the favourable verdict of an analyst, who will find in them most constituents that go to promote nutrition, and to make flesh; but we are convinced that the rougher, but after all truer, sense of taste must be applied before it is fair and proper to record a decided opinion as to preserved food of any kind; and having submitted most kinds of preserved food that have been brought into the market to this trial, we are bound to record that it is the best way to arrive at a correct conclusion.

A large assortment of preserved vegetables has been submitted to our inspection by Mr. George Buchanan, who read a paper on the process employed, before the Society of Arts, some months ago. These vegetables consisted of onions, broccoli, cabbage of various kinds, spinach, vegetable stock for soup, leeks, &c., all of which were sent in paper parcels, looking, as indeed they were, very dry, and each having a slight odour of the vegetables in their fresh state. These vegetables, with the exception of the spinach, were subjected to Mr. Buchanan's process more than two years ago, and have been since kept in glass bottles, which latter have been opened at frequent intervals, so that exclusion of air forms no part of the process.

Simple directions for cooking were given with all, it being found necessary to boil (or rather simmer) them at least half an hour longer than the same kind or quantity would require in the fresh state. The onions (served as sauce) and the spinach, were as good as if cooked in the fresh state, and the other varieties were (with one exception, a mixture for haricot) very fair specimens of what is commonly called "green meat." According to our knowledge and belief, any housewife endowed with an average amount of culinary knowledge, or any "sea-cook," could produce, with these vegetables, as good a result as that above recorded. It appeared, too, that the "preserved" flavour, constant and unvarying in all kinds of preserved food, was almost absent; and this is a strong item of favourable evidence.

Drying at a low temperature is, we believe, the principle adopted; but it is not our province to criticise or particularise the process by which the vegetables are prepared, because these notes profess to deal only with practical results.

We believe that these results are satisfactory in that (1) the cooking is simple; (2) the flavour is retained; (3) they can be kept for a long time in good condition; (4) no very special care in storage appears to be required. If these results can always be maintained, these preserved vegetables ought to be very useful in our royal navy and in the mercantile marine. Scurvy in the latter has been very much decreased since the operation of the Duke of Richmond's Act; but until some radical change in scales of diet is made, so as to render lime- and lemon-juice unnecessary, this disease cannot absolutely cease to exist. These vegetables can honestly be recommended as wholesome and palatable, and it is therefore the interest of those commercially engaged in the matter to suit the pockets of those shipowners who care for the maintenance of sound and healthy crews.

EVELINA HOSPITAL FOR SICK CHILDREN.

THERE are no institutions in the metropolis more wanted and none more deserving of the hearty support of the public than those which are devoted, under proper management, to the reception and treatment of the sick children of the poor. They are, at the same time, even less liable to abuse than other hospitals established for the reception of adults. One of the best-ordered children's hospital is that situated in the Southwark Bridge-road, and founded by Baron Ferdinand de Rothschild in 1869, with thirty beds for in-patients and arrangements for the treatment of an unlimited number of out-patients. The success and usefulness of the institution may be gathered from the fact that the wards are always full, and during the first year 6000 out-patients were relieved. The hospital, which we visited a few days since, and inspected with entire satisfaction, has twelve wards of different sizes, and a separate building, with a distinct staff of nurses, for cases of infectious diseases which may happen to develop themselves amongst the actual inmates; and it is admirably officered. The founder has generously defrayed the cost of the site, and made provision to meet the expense of maintainng the thirty beds now occupied in the future. But there is still a large portion of the building unused, and room enough for about 100 beds in all. The applicants for admission are increasing in number, and the wants of the populous surrounding neighbourhood are great in respect of hospital accommodation for the sick amongst their little ones. It is proposed, therefore, to extend, if possible, the benefits of the institution by utilising the vacant wards, and for this purpose an appeal is about to be made to the public for the necessary funds. The cause is so exceptionally good that we hope and cannot but believe that the response will be a hearty one. There is scarcely a court or an alley in the maze of streets that lie thick around the hospital that does not contain at this moment many a poor child to whom the hospital would be the same haven of refuge, and admission to it the dawn of hope from pain, disease, and crippling, as it is to those who now enjoy its benefits; and, as the hospital is unencumbered, every shilling given to it will go direct to the alleviation of misery and suffering. Moreover, as the existing staff and machinery need be but little increased to ensure the proper working of the hospital when completely filled with beds, the average cost for each patient must lessen with every increase in the number received. The means, then, of assuaging the suffering of sick children in large numbers are at hand, and the public has but to loosen its purse-strings to secure that object. It was well said by Charles Dickens that "there are in this great town hundreds of well-disposed people so struck to the heart by the spectacles which the streets of this great city present, and still more by the dreadful spectacles they hide, that they would gladly do anything to set these things right if they knew how." We say there is one way of doing a great deal towards this object by seconding the efforts of the charitable founder of the Evelina Hospital, and we know nothing more likely to stimulate a man to this than a visit to the institution itself.

THE SMALL-POX EPIDEMIC.

PROGRESS OF THE EPIDEMIC.

THERE is no evidence whatever of any abatement of the small-pox epidemic in London. The sudden diminution of fresh cases which occurred in the week ending May 6th has not been maintained, and was probably due to obscure exceptional causes. The completed returns for the week ending May 13th showed that the number of fresh cases rose from 480 to 599, and the returns for last week will considerably exceed 600. There were 267 fatal cases in London last week—265 being the weekly average for the last six weeks. In nine permanent and temporary small-pox hospitals 110 deaths were recorded last week, 16 occurring in the Western, 77 in the Northern, 20 in the Central, 51 in the Eastern, and 101 in the Southern district. Somers-town, St. Pancras, Bethnal-green, Mile-end Old Town, Southwark, Walworth, Lambeth, and Battersea were the places of highest mortality—Battersea during the last seven weeks having no fewer than 96 deaths. For the six weeks ending last Saturday, 4 per 1000 was the average death-rate for all London. This is low, however, compared with continental towns.

In the provinces, again, it prevailed extensively; but with lessened virulence in Croydon, Brighton, North Meols, Stockton, Hartlepool, South Shields, and Llanelly. In Durham, Gateshead, Swansea, and Falmouth, the first half of this quarter showed an increase on the first three months of the year. Yarm sub-district recorded 53 deaths from small-pox in the six weeks ending May 13, against 31 in the first quarter of the year. In Great Grimsby, from its intimate connexion with small-pox-smitten Holland, the disease is epidemic, 70 deaths being recorded for the six weeks ending on the 13th. Southampton had 17 deaths last week—the registrar reporting an increase in fresh cases, and the presence of 55 in the workhouse and 17 in the temporary hospital. In Weymouth the disease has caused six deaths in the first half of last week.

HOSPITAL ACCOMMODATION.

The Lords of the Admiralty have again offered to place the *Ajax* at the disposal of the Metropolitan Asylums Board, and have arranged that she shall not cost any large sum for moorings. The Poor-law Board have urged the managers to accept the offer, and to take steps for fitting her for convalescents, with the object specially of relieving the overcrowding at Stockwell and Hampstead. Within the last fortnight the hospital accommodation has been augmented by the addition of fifty beds on board the *Dreadnought*, the occupation of six tents at Homerton, and the occupation of some new wooden huts at Hampstead. These huts deserve special remark. They are much cheaper when reckoned by the cubic space than any which have been previously erected; they are well ventilated, and admirably suited for the purpose. The entire cost will not exceed £5 per bed. We may be permitted to support the views of the Poor-law Board as to the necessity of reducing the number of patients at Stockwell to the normal standard, and of doing away with beds in the day-rooms, corridors, and receiving-rooms. This is the more necessary as the contagion is, and must be, greatly concentrated by the removal of the mild and convalescent cases. The danger will be increased should warm weather set in.

THE LANCET.

LONDON: SATURDAY, MAY 27, 1871.

THE examining bodies are wise in their generation. It is interesting to notice their uneasy activity, and their efforts to do something to look like an answer to the advocates of that highest part of medical reform—the reform of our examining system. They evidently desire to set their house in order—to diminish the number of competing licensing bodies, and so to remove one great scandal and absurdity. It would doubtless be some response to the universal wish of the profession and the demand of Parliament, as well as some reward of our humble efforts in this cause, to have conceded an amalgamation of the examining bodies of England, universities included, according to the scheme of which we gave an outline last week. We accept it as a proof that they feel that things cannot go on longer as they are—that a number of rival and incomplete bodies can no longer be allowed to do the work of one single and complete board responsible to the General Medical Council.

But we wish it to be clearly understood that this scheme does not, in our opinion, meet the necessities of the case, and that it will not satisfy the legitimate demands of the profession and the public. It shall certainly not have our approval; and if the profession is bent upon its own interests and elevation, it will refuse to be satisfied with this motley amalgamation.

The scheme is faulty in three respects:—

First, it is an amalgamation of interested bodies; whereas what we above all things want is a perfectly untrammeled, independent examining board, not appointed by the medical bodies, but by a Medical Council. We shall never make the best of medical education till we have a good examining board, elected without regard to the considerations which weigh with corporations, and composed solely of men who are best versed in the subjects upon which they are to examine.

Our second objection to the scheme is, that it is partial and territorial merely. The great objection made by Dr. PARKES and others is, that at present men go from the part of the country in which they study to a distant part for the sake of an easier or a cheaper examination. If the English Conjoint Board should be ever so satisfactory, what will be the advantage unless we can command the composition and the doings of the Scotch and the Irish? What will be the guarantee that there will be any uniformity in the examinations? Will there not, on the contrary, probably be a want of uniformity, and a temptation, as at present, to go to the easier Boards? The days are gone by for territorial distinctions of diplomas. All diplomas have an imperial value, and the future examinations must have an imperial character of excellence and uniformity. We cannot be satisfied with a scheme which contemplates London only, or Edinburgh or Dublin only. The question is one of national importance, and as momentous to the State as to the profession.

Lastly, the question of the composition of the Medical Council receives no recognition in this scheme. The bodies can try to amalgamate for the purposes of examining. They do not propose to try to amalgamate in electing representatives in the General Council. There more than ever they will have to fight for their nineteen separate rights; so that the Council will more than hitherto be an arena for the discussion of eighteen reasons why any particular proposition should not be carried, instead of for the discussion of the best methods of educating and examining medical students. It would certainly be more than ever unreasonable that nineteen bodies should each be accommodated with seats in the Council (to the exclusion of the direct representatives of the profession) when these bodies no longer exist in their individuality as licensing bodies.

Let us not, then, be misled by this scheme. It leaves untouched the great evils of the existing system. It acknowledges, but does not carry out, the principle of amalgamation. It seeks to save the corporations at the expense of the profession and at the sacrifice of public interests, and will not, we repeat, cure the evils at present complained of. We urge upon our readers to petition in favour of THE LANCET Bill, that either it may be read a second time or some guarantee may be given by the Government that the whole question of medical reform shall be fully considered by a parliamentary committee.

WHETHER we regard the Memorandum on Medical Officers of Public Health, of which we gave a short abstract last week, from a public or a professional point of view, it is undoubtedly one of the most important documents ever issued by a Royal Commission. As regards the public interests, we have for the first time a definite proposal for consolidating the various separate departments which have to deal directly or indirectly with sanitary questions. The large and experienced staff of officers now engaged in legal, engineering, statistical, and medical departments of the Local Government Act Office, will be placed in harmony with those who are employed under the Registrar-General, the Poor-law Board, and the Privy Council, and the whole will form an efficient, uniform, and economical sanitary organisation, which will centre in a Minister of Health responsible to Parliament, and extend its operations to the most remote country village and into the poorest home. Such an organisation seems to shadow forth the time when no person shall be allowed wilfully or for profit to damage another man's supply of the three essentials of life—food, water, and air,—and when the law and public opinion will combine to secure as far as possible these essentials for all who may not be reasonably expected to obtain them for themselves. But it is less with the public than with the professional aspect of the Memorandum that we have now to deal; and we have no hesitation in saying that the terms in which it is couched are in the highest degree honourable both to the Commissioners and the profession generally. The Commissioners have constructed their proposed organisation on no narrow basis. Their first thoughts are not for the rich and well-educated, but for the poor and ignorant. Take care of the latter, and the former will be safe. Secure the conditions of health for those who cannot

always obtain them by their own exertions, and the result will be diminished sickness and pauperism. Watch the beginnings of diseases where they mostly spread. Be sure that the principal duty of a public officer of health is and will be the treatment of disease amongst the sick poor; and because the sick poor are found everywhere, the Commissioners find themselves driven to the conclusion that the four thousand Poor-law medical officers of Great Britain form the most eligible basis of a sanitary executive. On behalf of that large and important staff, we thank the Commissioners for the confidence thus reposed in them. In no previous public document have their acquirements been so fairly estimated, or the value of their services so handsomely acknowledged. It is something altogether new and gratifying to find gentlemen who have been too often down-trodden and despised described in just and honourable terms. Whatever may have been the faults and failings of the Poor-law system, it is undeniable that the medical portion of it is unique in the good which it has attempted, and that the failure is not due to any shortcomings of the medical officers, but to the imperfect system of which they form a part. The Commissioners have no doubt as to the propriety of the selection of Poor-law medical officers as the permanent agents of the disease-prevention organisation. Neither have we. It is duty for which they are as a body well qualified. We have long asked for it on their behalf. The Commissioners observe, with justice, that they are intimately acquainted with the habits of the poorer classes, the classes which most need assistance. They are also fairly educated, and belong to that part of the middle class which combines sterling practical habits with considerable culture. It is quite true also that their life is one of perpetual education—that there is no large class of men more certain to keep up to the level of established and tested scientific knowledge, and none less likely to give way hurriedly to fantastic systems; whilst their life is already spent in striving to alleviate the greatest calamities of the most suffering—that is, of those who, being willing to work, are disabled by enfeebled health or actual disease. We shall add simply to this just description that they are ready—nay, anxious to assume the responsibilities which will devolve upon them as sanitary agents. We doubt not that they will do their best to qualify themselves for the faithful performance of their new duties, and that they will be stimulated by the thought that their power of usefulness to the communities amongst whom they practise will be immeasurably increased.

But, further, we see in the proposed reorganisation of the central departments having the management of matters relating to the public health, the prospect of better days for a class of men whose services have never been properly appreciated, and whose labours have been most shamefully ill-paid. We believe that any department of central government may be preferred by the profession to that of the Poor-law Board. At that Board the medical element has been altogether powerless for good; and it is consolatory to think that, under the new arrangement, it would certainly disappear by absorption into the Medical Department of the Privy Council. Under the direction of Mr. SIMON it is impossible to doubt that the profession will be more honourably treated and more firmly supported than it has been by the permanent officials of the Poor-law Board; and we know of no officer who is more certain to appreciate the advantage of a direct relation with the Poor-law staff as a means of diffusing sound scientific knowledge through the country districts, affecting not the medical man only, but the clergy, laity, and schools, thus bringing to bear a power which is stronger than any mere legislation can bestow. And whilst the medical profession will have thus within its grasp higher responsibilities than it has ever before enjoyed, it is only fair that the remuneration should be proportionally advanced. There can be no doubt that the office of a district medical officer of health would often be a highly invidious one. He will have need of great intelligence and skill to secure the public confidence, and he will require no little judgment and discretion to retain it. He must be patient towards the ignorant, and firm towards the selfish. On these accounts, not to speak of the great importance of the careful discharge of his duties, he should receive a far higher standard of remuneration than it has been the past custom of party politicians to assign to medical services; and he should also be placed in connexion with a local board composed of educated gentlemen, who would appreciate his work and support him in his difficulties, instead of with men of the guardian class, who would too often be the first to sacrifice him at the sacred shrines of their own dunghills and piggeries. Even under the present want of system, more than one medical officer of health has been made to suffer in his practice for reporting, to the disadvantage of the owners of the property, the unhealthiness of this or that part of his district; and a parish doctor might well shrink from the obloquy that he would incur, and the hornet's nest that he would stir up, if he were to become the sole index to all the sanitary imperfections of his locality. A man of courage and resolution might undertake the task with prudence, if he were properly supported by influential neighbours, and if the central authority had inclinations and powers for affording him adequate support. In that case he might reasonably hope to see the fruit of his labours, and, after the subsidence of some temporary ferment, to be hailed as a public benefactor, even by those who would at first withstand his efforts. But there is a great deal of human nature in man, and Parliament must not expect parish doctors, for the sake of an addition of a few pounds a year to their stipends, to enter upon a Quixotic battle with the giants Abuse and Misrule.

In conclusion, we cannot doubt that the proposed arrangements will, if adopted, be of immense advantage to the profession and the public; and we sincerely hope that no unnecessary delay will take place in giving them the force of law.

WE take leave to direct the attention of Sir CHARLES ADDERLEY to one branch of sanitary supervision, without which any scheme, having for its object the prevention of disease and consequent decrease of mortality must of necessity be imperfect in its construction and unsatisfactory in its operation. No control what-

ever is exercised over that vast floating population of which our coasting trade is composed, which, with the crews of ocean-going vessels, consists of a complement of over 300,000 men, besides women and children. It is a patent fact that, in spite of the advantages derived from carriage by railway, the coasting trade of the United Kingdom is increasing year by year. It is notorious that these coasters are dirty in an extreme degree; and that, in the vast majority of instances, their inhabitants are fully as careless in matters of cleanliness as those who dwell in the courts and alleys of the metropolis. Experiences gleaned in this as in former epidemics, and the records of the Seamen's Hospital, of Dr. LETHEBY, and others who have practical knowledge of the question, all amply attest this fact. And, lastly, we know by the statistics of mortality that small-pox is now obtaining the vast majority of its victims from the waterside towns of the kingdom, and that very few of these towns possess hospitals for the reception of infectious cases. During the last few weeks no less than nine vessels have been reported by telegraph in the columns of the *Shipping Gazette* as arriving at various home ports *from* home ports with cases of small-pox on board; and we know by the same authority that the crews of two vessels—one from Liverpool and the other from Shields, both bound for New York—have been affected with the disease; the former, indeed, lately arrived in America, having lost seven persons out of a complement of 270 passengers, and was, of course, placed by the authorities in strict quarantine. The evils consequent upon the present system of non-interference with the shipping are threefold:—(1) Disease is propagated directly from port to port. (2) A vessel having carried cases of small-pox from one port to another is seldom or never disinfected, and is, therefore, fully as dangerous a vehicle as any cab or carriage that has conveyed small-pox patients. (3) Vessels arriving at foreign ports with small-pox on board are put into quarantine, and commerce suffers accordingly. It is acknowledged that, in respect of ships engaged in the foreign trade, the system of quarantine is, as regards this country, entirely impracticable; and any endeavour to apply the system to the coasting trade would be superlatively ridiculous. But with the above-quoted facts before us, it is a plain duty to accomplish three things:—(1) To improve—and when improved to supervise more strictly—the drainage of our waterside towns. (2) To provide floating or other hospitals for all who come into port sick. (3) To provide for the compulsory cleansing and ventilation of all vessels (in accordance with the instructions given by medical officers of health as regards houses) under all circumstances, and for their proper disinfection, as with cabs and carriages, in special cases. Most waterside towns possess great natural advantages in the way of drainage operations; but we may cite Liverpool and Newcastle as instances in which these advantages have induced apathy in sanitary matters and an exceptionally high death-rate. The disgraceful way in which sailors suffering from small-pox have lately been landed from vessels at our ports (e. g., as at Plymouth and Shields), dragged about the streets by their captains from the pillar of one local authority to the post of another, sometimes dying in transit, is sufficient to warrant our second categorical requirement, the most economical way to effect which would be that every port should be provided with a miniature *Dreadnought* from the fleet of old hulks now rotting at moorings in the Medway. The cleansing and ventilation of all vessels must of course be done under inspectorial management. All vessels within the City district of the Thames are so inspected under the direction of Dr. LETHEBY. But that officer has represented several times to the Commissioners of Sewers that this piecemeal inspection is next to useless, because no general and complete sanitary surveillance of the shipping in the port of London exists. Until, however, the co-operation of the Board of Trade is obtained, or the very limited sanitary powers now entrusted to them transferred to Mr. SIMON'S department, we cannot fairly hope to check the current of epidemic diseases, or to lessen their severity.

Medical Annotations.

"Ne quid nimis."

AN UNRECOGNISED SERVICE.

THE Naval Medical Service has, we think, good ground for complaint of the manner in which the honorary distinctions conferred on the public services on the occasion of the Queen's birthday have been dispensed. Neither army nor navy medical officers, however distinguished, have yet attained to the membership of the first class of the Order of the Bath, and the power to write G.C.B. after their names; but the K.C.B., or second class, has always been open to the profession, and in former years was fairly bestowed as opportunity occurred. On the present occasion, however, there is but one fortunate *décoré* of the Army Medical Department—Sir David Dumbreck, M.D., Inspector-General of Hospitals; whilst the Navy Medical Department is conspicuous by its absence, not only in this class but in every other. The whole of the naval medical service boasts at present but one K.C.B.—Sir David Deas; but it was fondly hoped, by those who have the interests of the department at heart, that opportunity would at this time be taken to recognise its merits in the person of its head—the Director-General. Can anyone not in official bondage pretend that Controller William Henry Drake has greater claims for recognition than Dr. Armstrong?

When we come to the third division of the Order of the Bath, we find the same monstrous disregard of our naval brethren's claims. An army inspector, a deputy inspector, and the surgeon-major of the Scots Fusilier Guards are rewarded with the military C.B., but no recognition is made of the sister service. Now the active list of naval Inspectors of Hospitals contains but two C.B.s, and the Deputy Inspectors' but one, and these all date from the Crimean War. Could Her Majesty's advisers select no suitable name for reward among all these meritorious officers?

The Civil division of the third class is a very remarkable one apparently, and is appropriated entirely, in the late *Gazette*, to the reward of quasi-military officials. A controller, the Superintendent of the Royal Small Arms Factory, a deputy-controller, and an assistant-controller, are the men whom it pleases the Queen to honour, but no naval medical man, even although his duties of late may have been of such a civil character as to entitle him to come into the class.

We shall probably be told that medical men should seek other than mere titular rewards; but we say that they are

fully entitled to both titular and substantial reward for their services. It is a matter of no small moment to the well-being of her Majesty's naval forces that the medical department should be in good order, and able to hold its own in sanitary and professional matters. It is a fact that the head of a department carries greater weight when he possesses a title than when he is simply a "Doctor"; and we call upon the Government to repair the omission which has too long been disregarded.

THE FELLOWSHIP OF THE COLLEGE OF SURGEONS.

THE Fellowship of the College of Surgeons of England, by examination, was instituted as a surgical degree to which those who aspired to the honours of the profession might attain by showing an advanced knowledge of surgery, together with a competent acquaintance with anatomy and physiology. A candidate was required to be twenty-five years of age, to have studied at a hospital for six years, and to pass a preliminary examination in classics, mathematics, and modern languages; or, if he were a member of twelve years' standing, he might dispense with all preliminary tests. The scheme worked well, and the younger surgeons who sought hospital appointments became Fellows as soon as they became eligible by age, whilst others, and particularly members of the public services, were content to wait until their twelve years had expired, when they presented themselves for an examination modified to suit the more practical knowledge of experienced practitioners. The number of Fellows thus made at the half-yearly examinations was not large, averaging twelve or fifteen per annum; but the successful candidates had necessarily displayed a competent knowledge of anatomy, physiology, and surgery.

Unfortunately, a few years back the funds of the College became low, and the number of ten-pound Fellows by election having nearly come to an end, the Council of the College bethought them of other means of "raising the wind," and accordingly reduced the period of twelve years' membership, qualifying for the Fellowship, to eight years; and separated the examinations in anatomy and surgery, allowing them to be passed separately instead of together, as heretofore. Not satisfied with this arrangement, however, the Council next decreed that third-year's students of medicine should be allowed to pass the anatomical and physiological examination for the Fellowship whilst still *in statu pupillari*; and we need hardly remark that the effect of this legislation has been to bring numerous five-guinea fees into the coffers of the College, whilst the student has been encouraged to throw aside all anatomical knowledge at a comparatively early period of his career. It should be mentioned, also, that about the same period the system of setting two papers, senior and junior, in anatomy and physiology, was abandoned, and all candidates were required to pass the same examination.

This brings us to a matter of considerable interest at the present moment, and which has excited much comment during the last week. On Friday, the 19th inst., the first or anatomical examination for the Fellowship was held, and upwards of seventy candidates presented themselves, among whom were some members of many years' standing. On this occasion, for the first time, the examiners adopted a new rule of setting only four questions, *all* of which must be answered satisfactorily to ensure a pass, and our readers may peruse the questions at their leisure at p. 730. The questions we wish particularly to call attention to are the second and third, the former of which demands a description of the development of the human brain compared with that of the several classes of vertebrata, and the latter requires a dissection of the otic ganglion. Now, we doubt the propriety of asking the former question even of an advanced student in full work, but to require it of a practitioner of eight years' standing is simply absurd, not to say cruel. The question relating to the otic ganglion is not so bad perhaps, but it was complicated by the direction of the presiding examiner to give the dissection *from without inwards*. We have the authority of Professor Ellis for stating that the otic ganglion *cannot* be displayed by this method, and that it is only *from within* that the ganglion can be shown; it would appear therefore that the task required of the candidates was an impossibility. The effect of such questions being set has been to drive a considerable proportion of the candidates from the examination room, and, in the case of the senior candidates at least, to inflict very considerable hardship and not a little pecuniary loss. We protest against the system of proposing the same tests to students and practitioners, and we maintain the modern system of allowing the anatomical examination for the Fellowship to be passed in the third year to be founded in error, the effects of which will be evidenced in the profound ignorance of anatomy among the younger Fellows of future years.

THE TENURE OF HOSPITAL OFFICES.

A CONTROVERSY has lately raged at Sydney, into the personal elements of which we have no desire to enter, but which has raised a question of principle that is of considerable importance both to the profession and the public. Sydney possesses only a single general hospital, the Infirmary; and the staff consists of four physicians and four surgeons, each of whom is elected for a period of four years. The rule is, that one physician and one surgeon retire every year; and it has been the custom that they should be re-elected, as long as they desired it, as a matter of course. This year, however, some of the subscribers bestirred themselves to alter the custom, and to convert the operation of the rule into a real opportunity for effecting a change in the staff. The result was that they carried their point, and that Dr. Roberts, the senior surgeon, was displaced, by a majority of 200 in 900 voters, to make room for Mr. Fortescue, who had not previously held office. Those who opposed Dr. Roberts spoke of his attainments and his work with the highest respect. He had held his post for sixteen years, and is said to be the leading surgeon in the district. The argument was that he had already gained from the hospital, alike in skill, in experience, and in professional position, all that he could ever expect to gain; and that, in the public interest, another ought now to enjoy similar advantages. There are many surgeons in Sydney, and to say that four of them shall hold hospital appointments for life, to the exclusion of all the rest, would be to constitute a monopoly that is unfair to the excluded members of the profession, and injurious to the public, who desire to have more than four practised operators at their disposal.

With this argument we must say that we in the main agree; and we are glad to find, from the correspondence sent to us, that it commanded many supporters in the profession. The belligerents on either side appealed to English customs; but these have really little bearing upon the case, except in our provincial towns. In London, any man of sufficient merit is sure to find his place at one of our numerous hospitals, and the difficulties in the way are only just enough to prevent the path of pure surgery from being crowded by more aspirants for fame than could be maintained by its ordinary rewards. In provincial hospitals the long-continued retention of surgical office has sometimes been an occasion of grave scandals and miscarriages. Far more commonly it is, as urged at Sydney, a means of ex-

cluding capable men from work which it would be to the general advantage that they should do; and this, where there are many practitioners, and where there is only a single hospital, seems to us to afford an ample justification for a system of short tenure of office. We cannot say that the period of tenure that obtains at Sydney seems to us the best that could be devised. We would suggest that it might be increased to five, or even to six years; that one re-election should be the rule, but that a second re-election should be prohibited. A man who at first turned out to be a failure would then have five or six years in which to overcome his difficulties; and a good man would enjoy, for ten or twelve years, the opportunities of hospital experience. If a consulting staff were made a reality instead of a fiction, he might continue for a time to give to his junior colleagues, and to their patients, the benefit of his advice with regard to the course that in any obscure case it might be most proper to adopt; but he would no longer, after his own skill was perfected, stand in the way of the perfecting of the skill of others.

ELECTROLYSIS IN SURGERY.

M. GROH (*Centralblatt*, No. 2) has made a series of experiments with differently constructed batteries. He finds that strong currents are best adapted for those cases in which it is desirable that rapid destruction should be effected, as in carcinoma; but for the treatment of small tumours, and where the object is to produce coagulation, those batteries should be used which consist of a small number of small plates. The pain accompanying the operation increases with the number of the elements. He is of opinion that in those cases in which it is desired to avoid pain as far as possible, the batteries that are used for galvano-caustic purposes are most appropriate. He believes that electrolysis is only a corrosion of the tissue; nevertheless, in a great number of cases, it acts better than any other caustic. In the first series of cases he reports that he treated six patients in twelve sittings with the catalytic current. None of these patients were narcotised, and the pain was found to be supportable up to twenty elements. One of them was a man, aged thirty-nine, with hydro-sarcocele. Immediately after the application considerable diminution of the consistence of the tumour was observed; and after four days it had diminished one-half. In a number of other cases of strumous enlargements, melano-sarcoma, &c., success attended the treatment in some, failure in others. In a second series of experiments M. Groh endeavoured to introduce arsenic and sodium into the body by means of the current, but obtained only negative results. He has used electrolysis in various modes: with strong currents applied for a short time, and with weak currents for a longer period; the former in cases of angioma, hæmorrhoids or swellings, scrofulous lupus, condylomata, and sarcoma, and in all instances with good results. The application of weak currents he thinks deserving of much more extended trial, as it has answered capitally in his hands.

INTEMPERANCE AS A CAUSE OF DISEASE IN THE ARMY.

IN the Blue-book just issued by the Army Medical Department, we find this subject alluded to by several medical officers. Inspector-General Paynter, C.B., reporting on the sanitary condition of the troops at Malta, expresses a strong opinion that drinking to excess is a fertile cause of disease at that station. So much impressed is he with the fact, that he attributes a very great majority of the admissions into hospital to the effects, either directly or indirectly, of intemperance. Deputy Inspector-General Bowen writes to the same effect from Bermuda. He does not think the sale of spirits at canteens desirable, believing that it encourages spirit-drinking. The craving for stimulants, referred by many people to the depressing influence of the climate, he considers, with a good deal of justice, to be mainly attributable to the effect of habits developed, if not engendered, by the facilities afforded to the soldier for obtaining spirituous liquors—habits that might be contracted anywhere else, though the effects would not be everywhere so injurious. Malt liquors are not procurable at these stations at reasonable prices, and commanding officers naturally fail to perceive the utility of prohibiting the sale of spirits at the canteens when the soldier can procure any amount of them at the numerous low public-houses and spirit-shops that are the curse of places like Malta and Bermuda. It is really time, we think, that these places should be diminished in number, and subjected to some control. They compete with one another in supplying cheap and adulterated liquors.

We understand that the system, lately introduced, of weekly payments to soldiers serving at home, as a substitute for that of the daily pay, as heretofore practised, does not work well. It is said to have led to an increase of intemperance, and, as a consequence, to an increased amount of sickness and crime, of relatively petty or trifling character it is true, but not the less real on that account. The practical working of the system of weekly payments in the Marines, we believe, proved satisfactory; but, from all we can learn, this has not been the experience of line regiments.

THE CONVERSAZIONE AT GUY'S.

AT Guy's Hospital on Wednesday next will be held an inauguratory reception, on an extensive scale, and calculated to be at once brilliant and entertaining. Of the new wards situated in the northern end of the south wing of the hospital, each measuring 122 feet in length and 45 feet in breadth, three will be thrown open, as well as the grand central staircase—accommodation, large indeed, but not more than sufficient for the company expected in compliance with the Treasurer's invitation. Refreshments and dissolving views may be had on the ground floor; an extensive and valuable collection of objects of scientific interest will be exhibited in the ward above; while on the third floor a concerted entertainment will be given by "the Guy's Minstrels," a band of amateurs composed of students of the hospital, who relieve the severity of their studies by musical recreation.

THE OPERATION OF THE CONTAGIOUS DISEASES ACT OF 1866.

DR. BALFOUR, F.R.S., has contributed a paper under this head to the Army Medical Report. As very conflicting statements have been expressed concerning the effect of the operation of the Act on the prevalence of this class of diseases in the army at home, Dr. Balfour considered that it might be useful to ascertain from the numerical returns the extent of any change that may have taken place at the stations where the Act has been in operation as compared with others in the United Kingdom where it has not. The most important of this class of diseases is, of course, that which includes the affection which is the precursor to the constitutional and general manifestations of disease. At stations under the Act the ratio of admissions for 1000 of mean strength has been, for the primary form of the disease, 86 in 1867, 70 in 1868, and 61 in 1869, as against 106 in 1867, 108 in 1868, and 113 in 1869 at stations not under the Act. It will be seen by this that there has been a progressive decrease in each year in the admissions per 1000 at the former stations, while there has been a slight

progressive increase in the proportion of these cases at the latter stations. The only conclusion that can be drawn from the contrast exhibited by the results at the two classes of districts is one strongly in favour of the operation of the Act in steadily diminishing the amount of venereal diseases among the troops.

YELLOW FEVER IN BUENOS AYRES.

AT the beginning of this year Buenos Ayres had a population of more than 180,000. Towards the close of January (which is a summer month in that part of the world) yellow fever began to show itself in that city, and by the end of the first week in February the deaths due to it numbered 50. The fever increased in severity, and 1757 persons died of it during the last week of March. The latest official returns show the deaths during the week ending April 12th to have reached 2926. The total mortality due to yellow fever in Buenos Ayres during the period from the 1st of February to the 12th of April is given officially as 9758, and probably exceeds that number.

These statistics, however, do not give an adequate idea of the extent of the calamity. As the fever increased in severity the inhabitants began to fly from the city into the country, and from 180,000 the population of Buenos Ayres had sunk to 30,000 by the beginning of April. There was, therefore, a mortality of about 3000 in one week among a population of 30,000—decimation in one week.

Buenos Ayres lies very low, part of it being only a few feet above the level of the sea. Cesspools abound in it. There are more than 60,000 cesspools, many of which have been in use for more than a century; some, it is said, for two centuries. Since the outbreak of the plague attempts have been made to clear out some of these cesspools—a proceeding which we cannot help regarding as very hazardous. The streets have been covered with gas-tar; carbolic acid has been thrown about in all directions; and turpentine allowed to diffuse into the air, in the hope that the ozone generated by the slow oxidation of the turpentine might aid in arresting the contagion.

PRESENTATIONS AT BIRMINGHAM.

A HIGHLY interesting ceremonial took place on the 19th inst., in the presentation of a testimonial to Dr. George Fabian Evans, on the occasion of his retirement from the office of physician to the General Hospital, an office which he had held for thirty-four years. The movement was suggested, and largely supported, by members of the medical profession. Of the sum subscribed, a portion was expended upon a portrait of Dr. Evans, which was presented to the General Hospital, a portion upon two silver salvers, with suitable inscriptions, and the remainder, amounting to £733, was placed in Dr. Evans's hands, and was by him lodged with trustees to be devoted to the formation of a medical library in Birmingham. The meetings at which the presentations took place were in themselves the highest possible tributes to the manner in which Dr. Evans has upheld the character of the "beloved physician" during his long and honourable career; and we cordially congratulate him upon this gratifying tribute to his high qualities. The fact that he has never been an author has in some measure tended to confine the reputation of Dr. Evans within the circle of his personal influence; but in this circle it is unapproached; and he has long been recognised as combining the best professional gifts with the most thorough mental culture.

A few days previously a portrait of himself was presented also to Mr. D. W. Crompton, late senior-surgeon to the same hospital.

SANITARY CONDITION OF NORTHAMPTON.

THIS once clean and healthy town has for some time past been suffering heavily for its neglect of sanitary organisation. Dr. Buchanan, in giving evidence before a committee of the House of Commons in favour of an Improvement Act, stated that the death-rate from diseases amenable to sanitary treatment is very high. In the old borough, the death-rate during six months from scarlatina was at the rate of 51, from enteric fever at the rate of 5½, and from diarrhœa 19 per 10,000. In the outlying districts, the death-rate for the same period was from scarlatina at the rate of 33, from enteric fever 11, and from diarrhœa 36 per 10,000. In the drained houses he found scarlet fever prevailing at the rate of 41, enteric fever 2½, and diarrhœa 14 per 10,000. In the houses with cesspools scarlet fever prevailed at the rate of 112, enteric fever 25, and diarrhœa 50 per 10,000. The suburban parts of Northampton are in a miserably neglected state. The houses are built on water-logged sites, without drains; the roads present filthy accumulations; and the water-supply, except where it was furnished by the water company, was execrable. The contents of open privies and pigsties overflow into the road; ashpits and pigsties are close to back doors; open ditches are full of stagnant water; houses are built back to back. It is no longer a wonder that, under such circumstances, the death-rate is higher than the birth-rate.

THE CENSUS AND THE ESTIMATED MORTALITY.

THE mortality of the large towns has been estimated on the rate of increase which took place between 1851 and 1861. This estimate has proved very erroneous in some cases. Thus the population of Liverpool has been found to be more than 20,000 less than was anticipated, and the annual mortality of last quarter, instead of being 43·7 as calculated by Dr. Trench, is in fact 45·9. The population of Birmingham, Newcastle-on-Tyne, Sheffield, and Hull has also been over-estimated, and the rate of mortality is therefore higher than was supposed; whilst the population of Leeds and Bristol is much greater than was estimated, and the annual mortality for the last quarter was in Bristol 25·9, instead of 27·3, and in Leeds was 24·3, instead of 25·7. Manchester is the only place where the calculated and actual population is the same.

THE LATE INQUEST AT CHURCH.

THE case was of this kind. A police-sergeant, long the subject of symptoms of disease of the liver, got gradually into a state of ascites. For this he was attended by Mr. Martland, of Blackburn, whose treatment was the ordinary one by diuretics, &c. Five days before the death of the sergeant, Mr. James Dearden, surgeon, of Church, called on the deceased on the Sunday without being sent for, and gave as his chief reason for calling that he knew the sergeant. After this friendly visit, Mr. Martland was dismissed, and Mr. James Dearden came into possession of the case, and prescribed digitalis and other powerful remedies. The patient got rapidly worse. Mr. Martland was again summoned to see him on the Thursday evening, but only to find him insensible and dying, and he sank on the day following.

We have carefully perused the evidence in this case, and we have no great fault to find with the jury for their verdict. From their point of view, and with the evidence before them, they not unnaturally came to a verdict of death from natural causes. But we may be permitted from our point of view to comment upon some of the ethical views of Mr. Jas. Dearden. For a medical man to call upon the patient of another medical

man without being sent for is a proceeding that admits of no excuse but that supplied by friendship or relationship. We can easily understand that there was a friendship between Mr. Dearden and the police-sergeant according to his own explanations, but it must be recorded as a unique instance that a medical man was on such intimate terms of friendship with a policeman as to induce him to disregard considerations of taste and respect for another practitioner who was treating a case intelligently, and with the only degree of success that was possible—viz., a postponement of the fatal issue.

SMALL-POX BY THE LAUNDRY.

WHAT can be more culpable or cruel than the piece of selfish neglect the particulars of which are recorded by Dr. Whitmore in his last monthly report of the health of Marylebone, and which led to the deaths of three persons and the sickening of many others by small-pox? Some body-linen, worn by a person who had just recovered from an attack of variola, was sent from the house of a certain family in London to a laundry at Hendon, with a mere caution given to the messenger that it should be washed separately and not mixed with other clothes—a caution which may or may not have been delivered to the laundress. It is said, however, that the latter disregarded it, and with the following lamentable consequences:—The son of the laundress who brought the linen home, and the daughter, took small-pox, and both died; a washerwoman also caught the disease, and spread it in her own home and to other families near. The servant of a family at Stanmore, for whom the same laundress washed, took the disease, and died; a child also in the same house was attacked, but recovered. Three servants in another family, whose clothes were sent to the same laundress, took the disease, but, happily, all recovered; their master and mistress escaping, in all probability owing to the fact that their linen was not sent to wash in the week in which the infected clothes were at the laundry in question. The negligence which has resulted in such disastrous consequences as those above detailed calls for severe punishment; and we hope that the efforts which are being made to bring it home to the offenders will not be fruitless.

THE MARSHALL HALL MEMORIAL.

WE understand that the Medico-Chirurgical Society is likely to undertake the trust of the Marshall Hall Memorial Fund. Negotiations are in progress with this object in view. The prize will probably be a money prize, awarded every five years, for the best original work done and recorded in the English language during the five years preceding the proper time for the award to be made, and relating to anatomical, physiological, or pathological research touching the nervous system of man. The value of the prize will be about £100.

THE METROPOLIS WATER-SUPPLY.

THE House of Commons was occupied on Tuesday evening last with an important discussion upon a resolution moved by Mr. Kay Shuttleworth, "That in the opinion of this House the water supplied to householders in London should be derived from pure sources, and should be delivered on the constant system." Several of the speeches delivered contain points upon which we shall comment on a subsequent occasion, noting, meanwhile, that the resolution was disposed of by the adoption of "the previous question," with the mover's assent. The second reading of the Metropolis Water Bill, which was set down for the same evening, was deferred till Thursday.

THE SEWAGE OF PENRYN.

THE Falmouth authorities are justly excited at the prospect which has opened upon them in reference to the sewage of Penryn, the latter place having commenced a system of drainage with an outfall into the river, into which it is proposed to discharge the sewage without any attempt at precipitation or otherwise diminishing its offensive character. Now, at Falmouth they are spending a large sum of money with the object of freeing the harbour from pollution by the town drainage; and now they find their neighbour, Penryn, is doing that which will render their efforts nugatory, for, notwithstanding the assertion of the Mayor of Penryn that the solid parts of the sewage would deposit in the many small creeks of the river, it is quite obvious that the tide will carry a good deal of it down into the harbour. The matter is to be referred to the Home Secretary, who, we hope, will interfere to prevent the Penryn authorities from throwing valuable manure into the river, and inflicting a gross injustice upon their Falmouth brethren below.

PESHAWUR—THE VALLEY OF DEATH.

WE perceive that attention has again been directed, in the pages of the *Army and Navy Gazette*, to the pestilential character of this valley, and its effects upon the health of the troops quartered there. Peshawur is malarious to a degree at the best of times, and the soldier serving there may be counted lucky if he does not contract and carry away with him an aguish form of fever that will recur betimes for years afterwards. Every now and then a terrible epidemic of cholera occurs, and each successive outbreak, according to Dr. Muir, the Medical Inspector-General of the British force in India, seems to increase in virulence. The ravages caused by the cholera at Peshawur in 1869, and the unhealthy condition of the various corps belonging to the Native Army quartered there, clearly indicate that Dr. Muir's opinion is the correct one—viz., that our only safety consists in the withdrawal of as many of our troops as practicable to hill-stations, and Cherat, an elevated position in the neighbourhood, might be utilised for this purpose. The Peshawur station is, we believe, for strategical reasons, considered an important position which cannot be altogether abandoned; but we earnestly hope that every effort will be made to maintain the smallest military force there consistent with safety.

SMALL-POX AND ROUTINE.

ON Wednesday last a sailor was put on board the *Dreadnought* hospital-ship from a steamer passing up the river with a small-pox eruption thick upon him. He was refused, was told to go to the Seamen's Hospital, Greenwich, was there refused admittance, and has probably, by this time, assisted to spread the disease far and wide in Greenwich and the neighbourhood. We venture to suggest that, in such a case, authority should be given to some one on board the *Dreadnought* to take charge of the patient, and provide for his immediate conveyance to one of the small-pox hospitals. This is, however, one among the many ways in which the shipping assists to propagate this or any other epidemic.

THE ORDER OF THE BATH.

THE Queen has celebrated her birthday this year by promotions in, and appointments to, the Order of the Bath, four members of the military medical service being included in the list—viz., Inspector-General (half-pay) Dr. David Dumbreck, C.B., to be K.C.B.; and Inspector-General Joshua Paynter, Deputy Inspector-General Richard James

O'Flaherty, and Surgeon-Major Bostock, M.D. (Scots Fusilier Guards), to be C.B.s.

Sir David Dumbreck has seen much service; he is honorary physician to her Majesty, and in receipt of a good-service pension. While congratulating him, we confess to a feeling of regret that we do not meet with the name of Dr. Muir among the officers upon whom the Queen has thought fit to confer a K.C.B., not only as a recognition of his long and distinguished services, but because he is so deservedly popular with all classes and still on full pay. It is possible that in this last fact may be discovered the reason why it has not been deemed expedient to confer the honour; if so, we are sorry for it.

THE GENERAL MEDICAL COUNCIL.

THE meeting of the General Medical Council on July 4th will be held at 32, Soho-square, and not at the College of Physicians, as has been erroneously announced elsewhere. The Executive Committee, whose duty, according to the standing orders, it is to prepare and arrange the business for the consideration of the Council, has been summoned for July 3rd, and therefore any matters which members of the profession may wish to bring under the notice of the Council should be forwarded to the Registrar without delay.

MR. CORRANCE, M.P., AND POOR-LAW MEDICAL REFORM.

WE stated in our last issue that Mr. Corrance intended to make a tour in Ireland for the purpose of investigating the system of poor relief, and more particularly the working of the Medical Charities Act. We now learn that he is not only there, but, with the view of making his inquiries more complete, has sent to the medical and Poor-law inspectors, and several of the dispensary physicians, some very practical questions. This, we understand, is preparatory to his bringing forward a motion in the House on the advisability of assimilating the medical relief systems of the two countries. It will come on as soon after the Whitsuntide holidays as the state of public and private business will permit. On page 731 of our present issue the text of his proposed motion will be found.

THE "DREADNOUGHT" SMALL-POX HOSPITAL.

THE system of draughting convalescent patients from the small-pox hospitals opened under the auspices of the Metropolitan Asylums Board to the *Dreadnought* hospital-ship off Greenwich, appears to answer particularly well. The inmates now number over 200, but we think the resolution arrived at, to increase the number to 250, a very injudicious determination. There is a fair cubic allowance of air for the patients now accommodated, all proper deductions being made for the many peculiarities incident to a floating hospital. We recommend the Metropolitan Asylums Board to "let well alone." The old *Dreadnought* thus far has done the work allotted to her in connexion with this epidemic exceedingly well, but the addition of another 50 inmates may foul the nest, so as to make a lazarette of the worst kind out of what is now a very complete isolated hospital for small-pox convalescents.

CASES OF ANEURISM AT THE GENERAL HOSPITAL, BIRMINGHAM.

IN our Medical Annotations of March 11th we recorded the cure of two cases of aneurism by manipulation, under the care of Mr. Oliver Pemberton, situated respectively in the third part of the subclavian and in the popliteal. We learn that the patients at this time remain perfectly well. On Wednesday, the 17th inst., Mr. Pemberton placed a ligature on the external iliac artery, two inches above Poupart's ligament, for the relief of a rapidly growing aneurism of the femoral, already stretching above the ligament. The case has gone on without a drawback since the operation.

In connexion with ligature of the external iliac artery for the cure of aneurism, it may not be uninteresting to recall the fact that it was within the walls of this hospital that George Freer, on the 4th of October, 1806, first successfully accomplished the operation, Abernethy's first successful case being performed seven days later. It is somewhat remarkable that there is no record of the operation having been repeated in the hospital during these sixty-five years.

A PARLIAMENTARY RETURN, moved for by Mr. W. H. Smith (in continuation of a similar return last year), shows that during the six years 1864–69 the proportion of deaths from zymotic disease to the total deaths registered was in England 22·8 per cent., and in Ireland 19·4 per cent.; in Scotland during the five years 1864–68 the proportion was 22·5 per cent.

THE Exeter local board has at length settled the vexed question of the disposal of the sewage of the city. A Company has been formed for utilising the sewage for agricultural purposes; and a twenty-five years' lease of the sewage is to be granted to them.

DR. C. J. B. ALDIS, the medical officer of health for St. George's, Hanover-square, reports a considerable decrease of small-pox in the parish. During the week ending Saturday, the 20th inst., there occurred only nine cases, six of whom were sent to the hospital.

WE are glad to be able to announce that H.R.H. Prince Arthur is nearly recovered from the fall on his head. The effusion within the scalp has disappeared; while his toe was not dislocated, as was at first thought.

THE Adulteration of Food, Drugs, &c. Bill passed *pro formâ* into the stage of Committee in the House of Commons on Tuesday evening last; and its further consideration was fixed for the 1st of June.

IT has been proposed that the British Medical Association, which holds its sittings this year at Plymouth, should meet at Birmingham in 1872.

MISSES MILLIE AND CHRISTINE.

THE Siamese Twins are altogether eclipsed by the extraordinary combination of two persons in one exhibited at Willis's Rooms on Monday last, under the names of Millie and Christine. These young ladies are now nineteen years of age, and were born of coloured parents in the old State of North Carolina in July, 1851. The *Philadelphia Medical and Surgical Reporter* for April 1st contains an interesting account of them by Dr. R. M. Townsend, from which we learn that the mother was a stout negress, thirty-two years of age, of large frame and pelvis. Her labour was brief and easy. The larger child was born first, by a stomach presentation, and the second by the breech. The children were remarkably sprightly and healthy, perfectly formed, but united at the sacra. In February, 1854, Professor Miller examined them, and reported that "the os coccygis of each is bent backward, and continuous with that of the other. The lower third of each sacrum is in like manner joined, forming with the attached muscles and integument a firm band, two or three inches in diameter, but so short that the nates of each child are pressed against those of the other. They

are thus united back to back, but not exactly parallel; there being a slight inclination to the right side of one, and to the left side of the other. In consequence of this obliquity, they lie more comfortably on one side than the other, and having been from birth constantly laid in this position, their heads are not symmetrical, the bones of the cranium having apparently yielded to the continued pressure in one direction."

In 1855, these children were for a short time in London, and were examined by Sir W. Fergusson, the late Dr. Francis Ramsbotham, and others. Dr. Ramsbotham described their condition as follows:—"All four of the tuberosities of the ischia appear perfectly distinct. There is but one anus, occupying the position it would naturally do, as regards the coccyx in one of the children, provided that child were separated from her sister. In a corresponding part of the body belonging to the other child there is a deep blind depression, such as we see in one variety of imperforate anus, looking very much, when superficially examined, as if it were the termination of another rectum.

Within the anus the finger passes into a wide cavity, the common continuation of the two intestinal recta; but the place where the two bowels unite in one canal is out of its reach. There are two sets of external organs, at the lowest part of the union of the two bodies,—two clitorides, two hymens, and two meati urinarii; but there is no fourchette, for the labia externa of each running backward in relation to each body, behind the symphysis pubis, meet the labia coming from the other, and their junction produces an appearance of there being only one vulva. Each of these conjoined labia is not longer than an ordinary labium of a child of the same age, one inch, and the fossa navicularis, although it contains a double set of external organs, is but little larger than if it belonged to a single child. The genital fissure, instead of commencing anterior to the lower part of the symphysis pubis, begins quite underneath, at some distance behind the symphysis. Each symphysis pubis is naturally formed, and they are separated from each other by a considerable space. The anus is on one side of the vulva, so that what answers to the perineum, about half an inch in extent, runs laterally to the tips of the coccyges, which are somewhat twisted to one side. There are two vaginæ, and without doubt two uteri. There is reason to believe that, although the sacra are united, the caudæ equinæ are separate, for if the external genital organs of the one are touched, the other does not feel it; but the same remark does not apply to their lower extremities. The connexion between the twins bears a great resemblance to that of the Hungarian sisters, who were exhibited in London at the beginning of the last century."

Quite recently, when staying in Philadelphia, the twins have been under the care of Dr. W. H. Pancoast, on account of an abscess in the blind depression which represents a second anus. Dr. Pancoast was able to ascertain the existence of two bladders with a common partition, and of two recta with a common anus; but was unable to discover more than one womb, the same having a very long neck, and communicating with a common vagina. Dr. Townsend also informs us that there is but one menstrual period for the two; and that the quantity of the secretion is not more than would be natural for one person.

We need only add to this description that, above the lumbar vertebræ, the bodies are entirely separate and distinct. The mental capacity is good, and in both cases independent. The organs of circulation and respiration are also separate; indeed, the bust and arms of each body are extremely well developed. Both faces have an exceedingly intelligent and pleasing expression, and the general colour of the skin is that of a rich mulatto. Below the first lumbar vertebra fusion commences, and the postero-lateral part of the sacra are united together, forming a complete double pelvis common to both bodies, and united at an angle of something like forty-five degrees. Each pelvis is provided with a pair of well-shaped legs of equal length. The total circumference of the union is twenty-nine inches. Although the general circulation is separate, it is obvious that there must be a constant interchange of blood, so that when one suffered from ague the other did so likewise. The union appears to extend to the spinal cord, so far as sensation is concerned, for whilst volition is only communicated by each to her special pair of legs, both feel when any one of the four is touched. Indeed, so complete is the union, that when one moves a foot or leg the other feels the action, even when she does not see it. These united bodies are in perfect health. They dance, sing, and converse agreeably with their visitors. They generally use all four legs, but they can walk on two. In that case it is evident that the habit has been acquired, and the action looks more like two persons hopping alternately than a common walk.

VACCINATION IN THE METROPOLIS.

ON Thursday a deputation from the Metropolitan Asylums Board waited on the Right Hon. W. E. Forster, M.P., to represent to him the necessity of improving the administration of vaccination in the metropolis.

Dr. BREWER stated that 5674 children had been admitted to the small-pox hospitals under ten years of age, of whom 1576 were unvaccinated. At Homerton upwards of 40 per cent. of the children admitted were unvaccinated. Of 4098 vaccinated children 299 died, or 7·3 per cent.; whereas of the 1576 unvaccinated children 588 died, or 37·3 per cent. It was also stated that 5·8 per cent. of the children in Marylebone were found unvaccinated.

Mr. FORSTER stated that there was no law that could be universally enforced; but that he was most anxious that improvements should be made. In the report of the Vaccination Committee it would be proposed to make the appointment of a vaccination inspector compulsory, and he would have to keep the vaccination-registers. The Government would be glad to entertain any proposals which the Board of Managers would place before him.

A GOOD EXAMPLE.—The Liverpool Corporation have resolved to grant the privilege of free bathing in the public baths, Paul-street, to all the children attending elementary schools, on such days and at such hours as shall be arranged by the acting engineer; the children, on every occasion, to be in charge of a master or mistress. In the other public baths the charge for children similarly introduced is to be one penny.

Correspondence.

"Audi alteram partem."

THE COUNCIL OF THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—As you have already in THE LANCET of last week announced my intention to become a candidate for a seat upon the Council of the College of Surgeons, I hope you will permit me to avail myself of the same medium to state the claims that seem to justify me in coming forward on this occasion, and to explain the principles that I hold with regard to some of the more important questions that are at this time occupying the profession. In selecting the present moment for commencing my candidature, I have been anxious, on the one hand, to avoid entering into competition with any of my professional brethren who might be thought to have a prior or stronger claim, and, on the other, I have been equally desirous to avoid the possible imputation of indifference or lukewarmness in offering myself when the proper time came.

It has already been intimated in your article that I was for about twenty years attached to the London Hospital as surgeon, and as teacher, first of anatomy, and subsequently of surgery. These appointments I have now resigned. I have also been surgeon to the Moorfields Eye Hospital; this appointment I still hold, and my practice is now mainly restricted to diseases of the eye. It will be for the Fellows of the College to determine how far this devotion to a special subject influences their votes in selecting a member of Council. With regard to medical politics it would be inexpedient to do more than give a general idea of my views, without pledging myself too rigidly or too minutely to any special line of conduct. Such pledges only tend to degrade that freedom of thought they are by some supposed to promote. I have always been an advocate for progress, and I believe that form of government to be the best which brings the foremost intellects into active operation, and the highest-class men into power. In applying this principle to the politics of our profession, we have but to work the materials we possess with zeal, intelligence, and honesty of purpose, and the result must be a high standard of excellence in those who control the future destinies of the College. In the Fellows we have a large section of the profession, ever increasing in number and intelligence, who constitute the elective body. It is their high and important duty to select with care, and without favour or bias, a Council who shall legislate for the College. If the deliberations of this Council be open and carried on in a spirit of impartial desire to promote the welfare of the profession, it will follow that the Examining Board must consist exclusively of those who are best qualified to perform its high duties, irrespective of mere claims of seniority; and wherever the one clashed with the other the best man should unhesitatingly be selected. It is in this spirit that I have hitherto endeavoured to exercise my privilege as a Fellow; it is in this spirit I would desire to act were I elected on the Council.

I cannot conclude this letter without offering a few remarks upon the manner in which, it seems to me, these elections should be conducted. In proportion as we respect the judgment and knowledge of the electoral body, and in proportion as we value our own single-mindedness and honesty of purpose in coming forward as candidates for a seat upon the Council, should we scrupulously abstain from the exercise of any influence beyond the simple announcement of candidature, the statement of such claims as may exist, and the explanation of views that may be doubtful or unknown. Beyond this, canvassing, as it is commonly understood, should be banished from our constitution. It presupposes either indifference, ignorance, or susceptibility to undue bias and favour on the part of the electoral body, and it places the candidate in a false position. When he has once fairly laid his claims before the profession, he should remain perfectly satisfied with their decision, and either accept the duties imposed on him with an earnest desire to fulfil them, or withdraw into his private sphere of activity, well satisfied that the Fellows, in making another selection, have been actuated by no personal feeling, but by the simple desire to promote the interests of the College.

I remain, Sir, faithfully yours,

Harley-street, May 16th, 1871. GEORGE CRITCHETT.

ON DIGITAL EXAMINATION OF THE UTERUS AND OF THE PELVIC CAVITY.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 13th you have published a lecture on Digital Examination of the Uterus, by Dr. Graily Hewitt, in every respect worthy of the reputation of the author. It contains, however, statements, no doubt unwittingly made, which are calculated to mislead the junior members of the profession with regard to the history of this department of medicine, and this must be my excuse for addressing you.

Dr. Graily Hewitt says: "Within the past thirty years much attention has been given to this subject. For some time the speculum was the instrument almost exclusively used in obtaining information as to the physical condition of the uterus. This method of investigation has been followed, in too many cases, to the exclusion of all other methods of examination," &c.

I have no hesitation in stating that Dr. Graily Hewitt is totally and entirely wrong on this point. I have been so thoroughly mixed up with the history of uterine pathology during the last thirty-five years that my testimony must carry weight with it. In 1836 I was in Paris attending the practice of the eminent surgeon Lisfranc, at La Pitié. Lisfranc was the first after Recamier to take up the then all but unknown subject of uterine pathology. He had a ward always full of uterine cases, the celebrated Salle St. Augustine, which I paced for years, and he constantly lectured and wrote on uterine subjects. One of his favourite subjects was "digital examination," which French pathologists call "*le toucher*," and I have repeatedly heard him devote an entire lecture to its elucidation. I may say the same of Velpeau, of Gendrin, of Emery, of Jobert de Lamballe, whose pupil, dresser, and house-surgeon I successively became, and who, one and all, paid special and exceptional attention to uterine pathology. In all the pamphlets and works that were then published, "*le toucher*" occupied a prominent part. In my own clinical lectures, given for years in the Paris hospitals, on uterine cases, I devoted the same attention to this mode of investigation. The specular examination was always by everyone considered secondary and supplementary. I can appeal to Dr. Barnes and Dr. Tilt, my then companions in Paris. Once settled in London, I continued to practise and teach the same doctrine—the primary importance of digital examination. In the first edition of my work on Uterine Inflammation, published in 1845, twenty-six years ago, I adopted the French term *toucher*, and well remember the friendly smiles with which it was received. In the second edition, in 1848, I used the term "digital examination." I became personally acquainted with Sir James Simpson in 1845, and was constantly in communication with him afterwards, and can testify to his having throughout his career given due importance, both in theory and in practice, to the digital investigation of the organs contained in the pelvic cavity. Indeed, I do not think a single author whose works I have read has omitted to do so.

There are two points alluded to by Dr. Hewitt that require a few words of notice. He thinks the usual British obstetric position the best and sufficient. For my own part, I think the patient should first be examined on her side, and then on her back, and that without this latter examination the information obtained is incomplete. The side position is perfect as far as the sacral portion of the pelvic cavity and the iliac region opposed to the one on which the patient lies are concerned. But the pelvic contents necessarily fall on the opposite pelvic and iliac regions, on those on which the patient lies, and prevent accurate investigation. Moreover, it is not so easy to depress the abdominal walls when a woman lies on her side as when she lies on her back in the lithotomy position.

Dr. Grailly Hewitt, speaking of the os uteri in women who have borne children, says "the aperture may be so large as to admit one or two fingers." Now I believe this to be an error, if it is meant that such a condition is compatible with a thoroughly healthy cervix and uterus. I do not deny that such may very exceptionally be the case; but I assert without hesitation that nineteen times out of twenty such a state of the os uteri means disease, and ought to lead us to make a careful examination with a large bivalve speculum. Such an examination will usually reveal a very diseased state of the mucous membrane lining the cervical canal of the open os. An open os is one of my most trusted guides and sanctions when I wish to decide whether more than a digital examination is justified and required.

I am, Sir, your obedient servant,

J. HENRY BENNET, M.D.

Grosvenor-street, May 18th, 1871.

DEFECT OF HEARING IN DIPHTHERIAL PARALYSIS.

To the Editor of THE LANCET.

SIR,—The important case mentioned by Dr. James Thompson (THE LANCET, May 13th) interests me so much that I write to ask him to state the interval, if any, betwixt the cessation of the local diphtheritic process and the onset of the diphtheritic paralysis. Dr. Greenhow believes that the slight defect of hearing in his patient was the result of an affection of the Eustachian tube, and this opinion from him deserves very careful consideration. If, however, the defect of hearing comes on some time after the diphtheritic inflammation has ceased, another hypothesis as to its causation may be held. It is admitted that the defect of sight is owing to palsy of the ciliary muscle, and I suggest that the slight defect of hearing may be owing to palsy of the tensor tympani. I say nothing of the stapedius, as this muscle comes off from the trunk of the portio dura nerve, and is not supplied by a ganglion; the ciliary muscle and the palate, the parts first and most affected in diphtheritic paralysis, are supplied by ganglia.

Theoretically, we should expect some deafness to occur from palsy of the palate alone, as the paralysed tensor and levator palati will not be able to open the Eustachian tube. (According to Von Troeltsch, the tensor opens, and the levator closes, this tube.)

Trousseau, in his Lectures (vol. ii., New Sydenham Society's translation, by Dr. Rose Cormack), speaking of diphtheritic paralysis, says, "The senses of smell, taste, and hearing are affected in some cases, but the affection of special sensation which is most commonly met with is dimness of vision."

In cases of diphtheritic palsy, affections of hearing should be inquired for, as probably the defect will be but slight. Indeed, Dr. Greenhow says that in most cases hearing is not sensibly affected. If we may judge by the conditions causing the defect of sight, the accommodating apparatus of the ear, and not the auditory nerve, will be at fault. However slight or transient the defect may be, it is important to note it carefully when it occurs, as being one symptom of a very remarkable series.

I am, &c.,

Bedford-place, May, 1871. J. HUGHLINGS JACKSON.

SPECTRUM ANALYSIS OF BLOOD-STAINS.

To the Editor of THE LANCET.

SIR,—From time to time I have made a large number of examinations of blood-stains of all kinds and ages, and have been led to regard their detection by the micro-spectroscope as a method of marvellous delicacy and unquestionable certainty. I cannot therefore but regret, especially at the present time, that any doubt should be expressed in the pages of THE LANCET respecting this method of research. The bands produced by blood are not "a little dimness," but are as distinct, as certain, and as well marked as the bright lines produced by various burning materials; and, what is more, the definite position of the bands is as certain as the definite position of the bright lines. Mr. Sorby has examined hundreds of substances, and asserts that no substance with which he is acquainted produces bands similar to those produced by blood. I have repeated most of his experiments with the same conclusions. I must say that, in my humble judgment, the detection of blood by the spectroscope is as positively certain as I can conceive any method of analysis to be.

I am, Sir, your obedient servant,

C. MEYMOTT TIDY, M.B.,

Joint Lecturer on Chemistry and Medical Jurisprudence at the London Hospital.

Cambridge-heath, Hackney, May 22nd, 1871.

*** The question is purely one of observation and fact. We think that if our readers will first look at the lithium line or the sodium lines, and then at the blood spectrum, they will be amused with our correspondent's statement that the blood-bands are "as distinct, as certain, and as well marked as the bright lines produced by various burning materials."—ED. L.

ON THE ACTION OF LIGHT IN SMALL-POX.

To the Editor of THE LANCET.

SIR,—Dr. A. L. Carroll, in his letter in your issue of May 13th, brings forward instances which he believes are in opposition to the conclusions at which I have arrived, as stated in the articles you have done me the honour of publishing.

Passing over the circumstance that Weber's æsthesiometer is not a pair of compasses, as he has kindly reminded me, I must say the examples he has mentioned do not, I conceive, refute my hypothesis. The tip of the tongue is, no doubt, very sensitive, covered as it is with mucous membrane peculiarly adapted by nature to detect tactile impressions, but not being part of the skin, I have considered it an exception, and altogether foreign to my subject. The plantar surface of the foot is generally in the dark, and is also very sensitive; but there is more or less constantly a determination of blood to this surface, due to the friction and pressure to which it is subjected. If Dr. Carroll will read my second paper in THE LANCET of April 22nd, he will see that there I have, as I think, explained this more fully than I can do in a letter.

In the articles I have written I have tried to avoid any detailed account of facts generally known to the profession, so as not to encroach on the valuable space in your journal unnecessarily, and have, perhaps, been dogmatic in my expressions upon subjects which of course as yet are uncertain. Rules have been the bases of my arguments, and the exceptions I have not mentioned, but I beg Dr. Carroll to believe I have not overlooked them.

I am, Sir, yours obediently,

Jermyn-street, W., May 16th, 1871. J. H. WATERS, M.B.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

THE sanitary state of this city is at present very unsatisfactory. Since the middle of February, when the Danube overflowed the low-lying districts near the Prater, there have been a great many cases of typhoid fever in the inundated parishes, and the disease has, at the present time, reached epidemic proportions. Thus, from the 20th to the 25th of April, 81 new cases are recorded, while 321 remained under treatment from previous weeks. From the 26th of April to the 2nd of May, 106 new cases occurred, and 348 old patients were still being treated. The mortality appears to have slightly diminished. Thus, the deaths in the week ending April 23rd were 33 in number; in that ending April 30th, 28. For the week ending May 6th, the deaths, excluding those of children in the Foundling and Lying-in Hospitals, numbered 514 persons, against 473 in the preceding week. Of these 172 died in the various hospitals. The following figures show the increase in the number of deaths occurring from the diseases named:—Typhus and typhoid,* from 28 to 47;

* Given together as "typhus."

phthisis pulmonalis, from 131 to 144; inflammatory lung affections, from 31 to 46; gastro-intestinal catarrh, from 55 to 67; small-pox, from 7 to 9; scarlet fever, from 3 to 6; measles, from 0 to 2. On inquiry I find that from the 1st to the 10th of May, post-mortems were made in the Pathological Institute (general hospital) of 16 cases of typhus exanthematicus, and 14 of typhoid fever. Gastro-intestinal catarrh has been very frequent, and even more fatal than the continued fevers. Thus, in the two weeks ending April 30th, there were 102 deaths from this cause alone—i.e., 47 and 55,—the total mortality from all causes being 449 and 473. The largest share of deaths must be assigned to phthisis and other lung affections. To prevent future inundations of the northern suburbs of Vienna, large works are now in progress to carry the Danube at its nearest point to the city in a new bed, and to reclaim the neighbouring land, which has hitherto been partly submerged and partly periodically swamped, by raising its level very considerably. It is also proposed to supply the city with water from springs at Neustadt, a town in the hilly district many miles S.S.E. of Vienna. At present filtered Danube water is what is distributed to the numerous public fountains and pumps, but prudent Viennese warn against its internal use at the present season, when the river is swollen with recent rains, and turbid with all sorts of *debris* and impurities. The localisation of the typhoid epidemic, however, does not point to the drinking-water directly as its source, for the suburbs on rising ground to the S.E. and S., which are far removed from inundation, but which receive the same drinking-water as the parts affected, have had few if any typhoid sufferers. It seems more probable that sewage matter was carried over, at the time of the inundation, into the wells, or into the porous sandy soil on which the streets of the Leopoldstadt and Alsergrund are built, for a similar but much less severe epidemic occurred after a small inundation in 1870. It is much to be wished that more attention were paid here to the cleansing of the public urinals, and to the trapping the air-holes of the sewers, the smell from which, even now after repeated heavy rain, is often very offensive.

An unpleasant affair occurred at the University buildings last Tuesday. Dr. Karsten, Professor of Botany, has, it appears, made himself obnoxious to the students by the severity of the examinations he gives, and the impossible amount of botanical knowledge he requires from them. About 500 or 600 students assembled in the afternoon at the lecture hour, and as Dr. Karsten himself did not appear, but sent his assistant to commence the lecture, they went upstairs to the examination room where the Professor was engaged. After an altercation, during which Dr. Braun, the Dean, appeared, and from whom they demanded the suspension of Dr. Karsten from his functions, their ire became so extreme that it was with difficulty that the Dean was able to protect the object of their wrath from personal violence, and get him safe away to his carriage. It is stated in more than one report that the Professor even received blows with sticks and umbrellas from members of the crowd. That they had some cause for their displeasure, though exception must be taken to their way of expressing it, will be understood when one states that out of 106 students who had been passed with the mark "*valde bene*" by the other Professors, Dr. Karsten rejected 102.

On Saturday, May 6th, the College of Professors unanimously resolved to choose Professor Bamberger, of Würtzburg, to be recommended to the Minister of Instruction for election as successor to the late Professor Oppolzer. Dr. Schrötter is at present "supplying" the vacant post *ad interim*.

Vienna, May 9th, 1871.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members passed the required examinations and were admitted Licentiates in Midwifery at a meeting of the Board of Examiners on May 24th:—

Giles, Peter Broom, Staunton-on-Wye; diploma of membership dated May, 1871.
Lycett, John Allan, Scarborough; April, 1871.
Pirie, Joseph O., Bombay; January, 1871.
Stickland, Samuel, Hawkhurst; July, 1870.

The following gentlemen passed the first part of the professional examination for the Fellowship of the College at meetings of the Court of Examiners on May 22nd, 23rd, and 24th:—

A. Ashby, G. H. Percival, Thomas Eastes, H. Seymour Branfoot, G. F. K. Smith, W. T. Law, H. Gordon Carlwright, T. D. Ransford, N. B. Elliott, J. L. Morley, W. E. Hacon, and A. B. Elliott, Guy's; J. Adams, D. H. Goodsall, J. A. Bloxam, William Square, A. L. Sobey, and E. Jepson, St. Bartholomew's; W. Barrow Wall, E. A. Schäfer, A. P. Gould, and J. Appleyard, University College; J. Hardwicke, and W. R. Thomas, Dublin; Delemark Freeman, E. Sergeant, and S. Edwin Solly, St. Thomas's; R. Lawson Tait, Edinburgh and Birmingham; Charles Roberts, and E. C. Baber, St. George's; F. H. Welch, London Hospital; Gustavus Hartridge, King's College; William Gartin, Liverpool and St. Thomas's; A. Kisch, St. Thomas's and London Hospitals; John Lewtas, Liverpool; Frederick Churchill, Edinburgh and St. Thomas's; W. A. Sturge, Bristol; C. R. B. Keetley, Hull, and St. Bartholomew's; A. Wanklyn, Cambridge and University College; A. P. Dean, St. Mary's; J. W. Taylor, Charing-cross Hospital.

Of the 59 candidates admitted to their *viva voce* examination on the above days, 18 failed to satisfy the Court, and were referred for a period of six months' further anatomical and physiological study.

Professor Birkett, F.R.C.S., will commence his course of six lectures on the Nature and Treatment of New Growths on Monday next, at 4 P.M.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on May 18th:—

Beech, Lionel, Royal Infirmary, Margate.
Clarke, Frederick Howard, Devonport.
Forshaw, Thurston, Heanor, Derbyshire.
Jackson, Thomas William, Leyland, Lancashire.
Moody, Henry, Erith, Kent.
Powell, Lionel Lewis, Melton Mowbray.
Younger, Edward George, Blackheath-hill.

The following gentlemen also on the same day passed their first professional examination:—

Archer, Edmond Lewis, St. Bartholomew's Hospital.
Price, Hugh Pugh Jones, Manchester.

A CONVERSAZIONE will be held at the Royal College of Physicians, by the President and Fellows, on June 14th, at 9 P.M.

APOTHECARIES' HALL, IRELAND.—The prize of five guineas for passing the best examination in Pharmaceutical Chemistry has this year been awarded to Mr. A. E. Swayne, the subject being the "British Pharmacopœia."

DR. ACLAND, on June 2nd, at 5 P.M., will lecture on "National Health"; and Dr. Guy, on June 7th, 9th, and 14th, at the same hour, will lecture on "War in its Sanitary Aspects, from 1793 to 1815," at the Royal College of Physicians. Members of the profession will be admitted on presenting their cards.

THE munificence of a medical practitioner in Hammersmith, Mr. John Betts, has just added to the educational agencies of the district by the erection and endowment of an elementary free school for 400 children in the locality of the Albion-road. The school building has a very handsome elevation, and is admirably arranged; and spacious playgrounds are provided for the recreation of the children who were entered on the foundation last week. Mr. Betts is himself a Churchman, but the school is unsectarian. Shunning publicity while yet his benevolent plan was incomplete, he has had the satisfaction of placing the school in trust during his lifetime. The cost of the site and building is between £7000 and £8000.—*West London Advertiser.*

BEQUESTS, DONATIONS, &c.—Mrs. Eliza Watson, of Loughton, Essex, bequeathed £1000 to the Asylum for Idiots; £1000 to the Royal Hospital for Incurables; and £100 each to numerous other charities. "P." has given his thirty-second donation, making a total of £345, to the Cancer Hospital, Brompton and Piccadilly. Ambrose Argenti, Esq., bequeathed £100 each to the Ophthalmic Hospital and St. Mary's Hospital. "C. R." has given £200 to the General Hospital, Birmingham. Mr. Alexander Reid has given £140 to the Royal Infirmary, Aberdeen; and £140 to the Hospital for Incurables. The Leicester Infirmary has received £100 under the will of Mrs. Martha Smith, of Lutterworth. James Joseph Tancred, Esq., has bequeathed £200 to the Hospital for Incurables, Dublin; and £200 to the Convalescent Home of the Adelaide Hospital, Dublin.

Medical Appointments.

ALFORD, S., M.R.C.S.E., has been appointed Medical Officer for the Southsea District of the Portsea Island Union, vice D. Mackintosh, M.D., resigned.

ALLMAN, T., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Islandeady Dispensary District of the Westport Union, Co. Mayo, vice T. H. Burke, L.K.Q.C.P.I., L.R.C.S.I., appointed a Poor-law Medical Inspector.

BROADBENT, L. G., M.D., M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for the East District of the Belford Union, Northumberland.

BURCHELL, P. L., M.B., F.R.C.S.E., has been elected Surgeon-Accoucheur to the City of London Lying-in Hospital.

CARTWRIGHT, S., F.R.C.S.E., has been appointed a Consulting Dental-Surgeon to the Dental Hospital of London.

EVANS, D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Madley or 3rd District of the Dore Union, Herefordshire, vice J. Branton, M.R.C.S.E., resigned.

FIRMAN, C. G., L.F.P. & S. Glas., M.R.C.S.E., L.M., has been appointed Medical Officer for the Milton District of the Gravesend and Milton Union, vice T. G. Cressy, M.R.C.S.E., resigned.

HUNTER, W., M.B., C.M., has been appointed Medical Officer for the Parish of Kingarth, Buteshire, vice C. F. Maclachlan, M.D., F.F.P. & S. Glas., deceased.

JOLLY, R., M.D., F.R.C.S.E., Surgeon to the General Hospital, has been appointed Joint Demonstrator of Anatomy at Queen College, Birmingham.

KEMPSTER, W. H., L.R.C.P., M.R.C.S., has been appointed Public Vaccinator for the St. George's or Eastern Division of the Parish of Battersea.

KIRBY, W. J., L.F.P. & S. Glas., has been appointed Medical Officer &c. for the Emlagh Dispensary District of the Cahirciveen Union, vice M. D. Murphy, L.F.P. & S. Glas., resigned.

LANGLEY, N. B., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Cricklade and Wootton Bassett Union, vice T. T. Taylor, M.R.C.S.E., resigned.

MURPHY, W. W., M.D., M.R.C.S.E., has been elected Resident Medical Superintendent of the Kerry District Lunatic Asylum, Killarney, vice M. S. Lawlor, M.D., deceased.

ROUTH, Dr. R. L., has been appointed Medical Officer and Public Vaccinator for the Aysgarth District of the Aysgarth Union, Yorkshire, vice M. Willis, M.D., deceased.

SELLS, C. J., L.R.C.P.L., M.R.C.S.E., has been appointed an Hon. Assistant Medical Officer to the Royal Surrey County Hospital, Guildford, vice T. M. Butler, M.R.C.S.E., appointed a Medical Officer.

SIMS, C., L.D.S. R.C.S.E., has been appointed Extra Dental Officer to the Birmingham Dental Hospital.

SMITH, A., M.D., F.K.Q.C.P.I., has been reappointed for a further period of seven years, King's Professor of Materia Medica and Pharmacy at the School of Physic, Trinity College, Dublin.

THOMPSON, G., L.R.C.P.L., M.R.C.S.E., Senior Assistant Medical Officer, and formerly Resident Clinical Clerk, at the West Riding Asylum, Wakefield, has been appointed Medical Superintendent of the Bristol Lunatic Asylum, Stapleton, vice H. O. Stephens, M.D., M.R.C.P.I., resigned from ill-health.

TOMES, J., F.R.S., M.R.C.S.E. & L.D.S., has been appointed a Consulting Dental-Surgeon to the Dental Hospital of London.

TURNER, J. S., M.R.C.S.L., has been appointed Medical Officer for District No. 5 of the Mansfield Union.

WADE, A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Boscastle District of the Camelford Union.

WADE, Dr. W. F., has been appointed Consulting Physician to the Birmingham Dental Hospital.

WEST, J. F., F.R.C.S.E., has been appointed Consulting Surgeon to the Birmingham Dental Hospital.

Births, Marriages, and Deaths.

BIRTHS.

FELCE.—On the 23rd inst., at Chippenham-road, St. Peter's-park, W., the wife of Stamford Felce, M.R.C.P.Ed., of a daughter.

GRAY.—On the 19th inst., at St. Giles', Oxford, the wife of Edward B. Gray, M.D., of a daughter.

HOPKINS.—On the 24th inst., the wife of Alfred Boyd Hopkins, Esq., of Shoreditch, of a daughter.

LAWRENSON.—On the 16th inst., at Ridgeway-hill, Dartmouth, the wife of R. C. Pasley Lawrenson, M.R.C.S.E., Surgeon H.M.'s Ship "Britannia," of a son.

PAUL.—On the 19th inst., at Bedford, the wife of Surgeon-Major Paul, M.D., Surgeon to the General Hospital, Madras, of a daughter.

TOMLINSON.—On the 16th inst., at Fermoy, the wife of E. D. Tomlinson, M.R.C.S.E., Assistant-Surgeon 84th Regiment, of a son.

MARRIAGES.

KIRKWOOD—POTTINGER.—On the 19th inst., at Toomna Church, Leitrim, Thomas Moore Kirkwood, Army Medical Staff, to Annabella, only daughter of Major-General Pottinger, C.B., of Mount Pottinger, County Leitrim.

ROWLANDS—HORTON.—On the 29th ult., at Christ Church, North Brixton, James David, eldest son of James Rowlands, F.R.C.S., of Carmarthen, to Elizabeth, eldest daughter of Isaac Horton, Esq., of Clapham-rise, London, and Ystrad, Carmarthenshire.

DEATHS.

DOIG.—On the 13th inst., James Doig, L.F.P. & S. Glas., of Waterside, Forbes, Aberdeenshire, aged 32.

HEATON.—At Leek, Sarah, the wife of Dr. Heaton, aged 53.

ORR.—On the 19th inst., at Crown-street, Liverpool, J. Orr, Surgeon, aged 76.

SMITH.—On the 21st inst., at Montague House, Bath, Dr. C. I. Smith, late Inspector-General of Hospitals, Madras Army, aged 62.

TENNANT.—On the 21st inst., Barbara Ann Tennant, wife of Chas. Tennant, M.R.C.S.E., of Newbottle House, Fence Houses, Co. Durham.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

DIPLOMA OF FELLOW.

THE following are the questions on the paper put into the hands of candidates at the first examination, in Anatomy and Physiology, held on the 19th inst.:—

1. What parts are in immediate relation with (1) the obturator internus and (2) the obturator externus muscles?

2. Describe the development of the human brain from its first appearance in the embryo up to the full period of intra-uterine gestation; and compare its several stages with the adult brain in the classes of Vertebrata.

3. Give the dissection required, and mention in the order in which they appear the parts that must be removed to expose the otic ganglion; describe its relations and the nerves connected with it.

4. Describe the structure of a "Malpighian body" of the spleen, and state the evidence from which it is concluded that the spleen is concerned in the elaboration of the blood.

THE EXECUTIVE OF THE BRITISH MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—Enclosed is a copy of a correspondence arising out of a letter of the Secretary of the British Medical Association, which was published in THE LANCET of April 1st. My four friends and myself are desirous that this correspondence should have as wide a circulation as the letter out of which it arose. We should, therefore, feel much obliged by its publication in THE LANCET.

Very faithfully yours,

Cambridge, May 22nd, 1871. G. E. PAGET.

Cambridge, April 24th, 1871.

MY DEAR MR. WILLIAMS,—In a letter published in THE LANCET of April 1st, you have assigned the reasons and motives for five persons, including myself, retiring from the executive of the British Medical Association. Now, the reasons and motives assigned in your letter are not the true ones. They are not those that were stated by the persons themselves, either in their letter of resignation, or in the discussion at Newcastle which immediately preceded their resignation, or in the resolutions (moved by Dr. Acland) which gave rise to the discussion. Our reasons were not that we "were opposed to the direct representation of the profession," but that those who acted in the name of the Association were unwilling to accept from a friendly Government a great measure of medical reform, or indeed any measure, however beneficial to the profession and the public, unless it contained the special provision for "direct representation." We thought and said that this was a mistaken policy—a policy by which one most favourable opportunity had been thrown away, and other opportunities, if they should occur, might in like manner be lost. We said that the policy was all the more unwise because it had rejected the promise of the Government to consider (fairly and without prejudice) the question of "direct representation" in the session of 1871. These being our reasons, you cannot be surprised at our feeling aggrieved that they should have been (however unintentionally) misrepresented in your letter. And the misrepresentation is not made pleasanter by being followed by what looks like an insinuendo, that we sought to preserve to the Universities and Corporations an undue influence in the Medical Council.

Your letter was signed as if it was an official letter of the Association, and on that supposition one of my four friends wrote to the President, Dr. Charlton, but, I hear, has not received a satisfactory answer. It appears to me, therefore, best to write directly to yourself, and ask you about the letter, whether it was a letter you were instructed to write, or was your own personally. If the former, our grievance is a serious one; but if the latter, I would frankly ask you whether you have any objection to correct the error into which you have fallen, and do justice to my friends and myself, and set us right in the eyes of the profession and the public. I am sure you will see that, while the opinions and conduct of all persons in public matters are properly subject to the freest criticism, no one has a right to assign wrong reasons or unworthy motives for another man's conduct. I am sure you would be the last person to do so intentionally.

Very truly yours,

G. E. PAGET.

British Medical Association,
13, Newhall-street, Birmingham, April 26th, 1871.

MY DEAR DR. PAGET,—I deeply regret to find that anything I may have written should in any way give you annoyance. I feel sure you will do me the justice to believe that I am the last man to attribute *improper* motives to you or your distinguished colleagues. It is right that I should tell you that the Chairman of the Reform Committee, Dr. Waters, Chester, and myself are responsible for that letter. You will agree with me that it is only right that I should communicate with him before I make any further reply to your letter received yesterday. I can only add now that if I find that I have in any way misrepresented your *reasons*, I shall be most willing to make any correction which may be necessary. I have experienced such kindness at the hands of yourself, Dr. Stokes, and Dr. Acland, when you respectively filled the office of President, that this is the least I can do. I am quite sure I can say the same of Dr. Waters. I will further add that I believe you are incapable of doing anything from an unworthy motive.

Yours faithfully,

To Dr. Paget, Cambridge. T. WATKIN WILLIAMS, Gen. Sec.

Cambridge, May 10th, 1871.

DEAR MR. WILLIAMS,—Your letter of April 26th (for which accept my thanks) led me to expect a further reply after you should have communicated with Dr. Waters. May I hope that this reply will not be any longer delayed. When one gentleman seeks friendly redress from another, a fortnight is a long time to wait for an answer.

Very truly yours,

G. E. PAGET.

British Medical Association,
13, Newhall-street, Birmingham, May 11th, 1871.

DEAR DR. PAGET,—I have *written* twice and spoken once to Dr. Waters upon the subject of your letter. The last time I wrote I sent him a draft of what I thought should be our reply. I assure you I see no difficulty in giving you a reply, and a satisfactory reply. I will again write to Dr. Waters, and trust I shall hear from him in a short time.

Yours faithfully,
T. WATKIN WILLIAMS, Gen. Sec.

Cambridge, May 12th, 1871.

DEAR MR. WILLIAMS,—I am glad that you are not in fault for the delay. Under the circumstances you cannot be surprised at my publishing the correspondence. I shall wait three days longer, and shall then feel myself at liberty to send it for publication, if I think proper, whether I shall have received or not an answer from Dr. Waters and yourself.

Very truly yours,
T. Watkin Williams, Esq., Gen. Sec., Br.M.A. G. E. PAGET.

British Medical Association,
13, Newhall-street, Birmingham, May 13th, 1871.

DEAR DR. PAGET,—I have forwarded your note of yesterday to Dr. Waters, and requested him to return to me all the papers I have sent to him *without further delay*. Possibly, as to-morrow is Sunday, I may not hear from him before Tuesday; but immediately I hear from him I will write to you.

Yours faithfully,
To Dr. Paget, Cambridge. T. WATKIN WILLIAMS, Gen. Sec.

Chester, May 14th, 1871.

DEAR DR. PAGET,—I hope to write to you to-morrow, and regret it has been utterly out of my power to do so sooner.

Yours faithfully,
G. E. Paget, Esq., M.D. EDWARD WATERS.

British Medical Association,
13, Newhall-street, Birmingham, May 15th, 1871.

DEAR DR. PAGET,—I beg to acknowledge the receipt of your letter of the 24th ult., in which you complain that my letter to THE LANCET misrepresented your motives for withdrawing from the Council of the British Medical Association. Your letter to *The Times* newspaper does not give any opinion as to direct representation, but simply states: "The Bill, it is believed, was withdrawn in the House of Commons by Mr. Forster, in consequence of the course pursued by the Direct Representation Committee of the Association. That course was subsequently approved by a vote of the Association at Newcastle. We therefore could not, in justice to ourselves or to the members of the Association, continue any longer to belong to its executive."

The "Direct Representation Committee" was appointed solely to obtain the direct representation of the profession in the Medical Council. The *principal* objection, though not the only objection, to the Bill was that it did not provide for the direct representation on the Medical Council; and as you disapproved of the action taken by that Committee, and subsequently, as you state, confirmed by an almost unanimous vote of the members at the annual meeting, I naturally concluded that you and your distinguished colleagues objected to direct representation. I will not, however, insist upon the correctness of my inference, but gladly accept your positive statement that you are not opposed to direct representation of the profession in the Medical Council.

Yours faithfully,
T. WATKIN WILLIAMS, Gen. Sec.

Cambridge, May 16th, 1871.

DEAR MR. WILLIAMS,—Your letter is not all that I hoped it would be. The "inference" which led you to misrepresent the reasons and motives of my four friends and myself was plainly at variance with what we had said and what we had written. It is at variance with the documentary evidences to which I referred you in my letter of April 24th, and particularly with our letter to the President of the British Medical Association, in which we plainly stated our reasons for withdrawing from the executive of the Association. It is at variance with another letter of ours, which you yourself have cited.

Such being the facts, it matters little that you "will not insist upon the correctness" of your "inference." Of course you will not. You cannot. Surely a plainer withdrawal of the misrepresentation, and some expression of regret, would have been more suitable to the circumstances.

But I feel that it would be useless to continue the correspondence on this matter if you, having had my letter of April 24th for twenty days, can see in it a "positive statement" that I am "not opposed to direct representation of the profession in the Medical Council."

Faithfully yours,
T. Watkin Williams, Esq., Gen. Sec. B.M.A. G. E. PAGET.

Chester, May 17th, 1871.

DEAR DR. PAGET,—I have heard through Mr. Watkin Williams, the General Secretary of the British Medical Association, that you complain that the reasons and motives which influenced you and your colleagues to retire from the executive of the Association, as given in a letter of his published in THE LANCET of April 1st, are not the true ones; that you did not secede from it "because you were opposed to the direct representation of the profession in the General Medical Council," as therein stated, but because the Association by its vote at the Newcastle meeting approved of the conduct of the Direct Representation Committee of the Association in not accepting the Medical Amendment Bill of last session.

As Chairman of the Committee from which the letter emanated, I desire to state that it would occasion unfeigned regret to misrepresent in any way you or your colleagues, and I have, therefore, much pleasure in accepting your own statement of the reasons for your resignation. While frankly avowing so much, I cannot for an instant admit the justice of any imputation of disregard of professional and public good on the part of the Direct Representation Committee, who regarded the moderation of the present preponderance of the Corporations in the Council indispensable, and held it a cardinal point of medical reform to make the Council representative of the profession as well as of the public and of the Corporations.

The Direct Representation Committee would have been false to the trust reposed in them had they accepted the Bill as it stood, for the specific duty of obtaining the admission of direct representatives of the profession in the Council had been entrusted to them.

I remain, dear Dr. Paget, yours faithfully,
EDWARD WATERS.

Cambridge, May 20th, 1871.

DEAR DR. WATERS,—I have received your letter, telling me that you have much pleasure in accepting my own statement of the reasons for my resignation. I have only to regret that you did not accept the like statement made repeatedly by my friends and myself (both orally in your presence, and also in writing) before the recent letter of your Committee was published. You would then have avoided the misrepresentation of which we have just cause to complain, and which we hoped would have been more promptly and candidly retracted.

I have no wish to enter upon a discussion as to whether you acted wisely or not in sacrificing the Medical Reform Bill to the question of direct representation; but if I did enter upon it, I could not ignore (as you do) the fact that the sacrifice was *unnecessary*. If the Bill of last session had been allowed to pass, the question of direct representation would by this time have been settled by a Select Committee of the House of Commons. This mode of settlement was fairly offered by the Vice-President of the Privy Council, and might have been carried out, as you now know, without any of that expense to the B. M. Association, which you assigned as one of your reasons for rejecting it.

Faithfully yours,
Edward Waters, Esq., M.D. G. E. PAGET.

Birmingham, May 19th, 1871.

DEAR DR. PAGET,—I regret to find from your note of the 18th instant that my last note to you was [*not* ?] entirely satisfactory. What more can I say? I cannot admit that I *wilfully* misrepresented you; that would not be true. I certainly wrote my letter as short as possible, as I did not consider anything could be gained by any long discussion of the matter. The Direct Representation Committee were instructed to obtain direct representation of the profession in the Medical Council. They refused to accept any Bill which did not contain such provision. This was the *only* thing they did. Because the annual meeting approved of what they did, you withdrew from the Council. Because I inferred that you were opposed to direct representation, you say I was wrong in my inference. I am truly sorry that I have in any way misrepresented you. I regret still more if I have again misunderstood you. The only question in dispute at that time was the direct representation of the profession in the Medical Council, and I should like to arrive at a correct conclusion whether you are in favour of this principle or not. I am sure you will believe me when I say that I am most anxious not to misrepresent one who is incapable of acting from any unworthy motive.

Yours faithfully,
T. WATKIN WILLIAMS.

I would not have troubled you again, but that you appear to think that I have not sufficiently expressed my regret at the error.

Notes, Short Comments, and Answers to Correspondents.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE Council beg to inform the members of the Association and the Poor-law medical service generally that Mr. Corrance, M.P. for East Suffolk, will as soon as practicable after Whitsuntide move that the present system of medical Poor-law relief is inadequate to the wants of the poorer classes, unsatisfactory in its results, and requires amendment. For this end it is expedient that the provisions of the Medical Charities Act (Ireland) and a dispensary system be adopted, with such further provisions as may render it especially applicable to the English system of poor relief. Although a strong feeling exists on both sides of the House in favour of Poor-law medical reform, it is more than probable that any such alteration will be resolutely combated by the official staff of the Poor-law Board. It is therefore, the Council state, incumbent on the members of the Association to communicate with such members of Parliament as they may personally know, and urge them to attend and support Mr. Corrance's motion, upon which he is determined to go to a division if such a course should be necessary. Sir Charles Adderley, Bart., M.P., Chairman of the Royal Sanitary Commission, has given notice of his intention to introduce a Bill to Amend the Sanitary Act. The Royal Sanitary Commission has recommended that rural Poor-law medical officers should be health officers of their respective districts, and that there should also be a registration of disease. The Council of the Poor-law Medical Officers' Association feel the necessity of keeping a watchful eye on this measure of Sir Charles Adderley, so that if any attempt be made to impose additional obligations without reasonable remuneration, it may be met by a vigorous and determined opposition.

Megatherium is thanked for his manuscript, which has been received; but no illustrations of any kind accompany it. With every disposition to oblige our correspondent, we fear that it would be quite impossible to find the necessary space for the publication of his lengthy paper. We do not remember to have seen the article in the journal named.

Xenophon, before "going up" for examination, will find the *anabasis* facilitated by procuring the desired information from the "General Committee for securing a Complete Medical Education to Women" in Edinburgh.

Mr. H. Sorby's letter, in reply to our annotation on the "Spectrum Analysis of Blood-stains," arrived too late for publication. It shall appear next week.

Percentator.—Apply to the Medical Department of the Privy Council.

HILL STATIONS IN INDIA.

To the Editor of THE LANCET.

SIR,—May I beg the favour of your giving an early insertion in your journal to the accompanying letter, with table and remarks, which I have received from Dr. Ambrose.

The question of the causation of cholera raised prominently by Dr. De Renzy in THE LANCET of the 13th inst., and partly by Dr. Ambrose in his letter, is irrelevant to my argument on the best principle of utilising the hill climates of India. In my writings on this subject, the word "cholera" only appears in the extract from the Sanitary Commissioner's Report, in my remarks in THE LANCET of the 28th January, and in my reference to that extract in your number of the 11th March, and could not have been omitted without garbling the record relative to the 58th Regiment.

My opinion on the question at issue may, in general terms, be formulated thus:—

1. A regiment after a continuous residence of two or three years at an elevation of 7000 feet and upwards is constitutionally much in the same state as a regiment resident in England. Therefore descent to the plains is analogous to arrival from England, and the effect on health in both cases will have relation to the season of descent or arrival, the station to which sent, the general sanitary management of the regiment, &c. When these conditions are adverse, there will be a heavy sick-list, chiefly from that form of fever named "ephemeral, febricula, common continued," and also a liability to sun-stroke. I do not see that Dr. Ambrose's table of the sickness in the 58th Regiment disproves this opinion; it seems to me rather to support it.

2. A regiment broken in health by service in the plains sent to an elevation of 7000 feet and upwards in the winter is analogous to a regiment, under similar circumstances, landed in England in the winter; and the effect on health in both cases will have relation to length of service in the plains, the diathesis of the men, the fact of recent or remote elimination of the sickly by invaliding, the nature of the diseases (as hepatitis or dysentery), and to sanitary management (clothing, housing, &c.)

The allusion by Dr. Ambrose to the health of the right wing of the 58th Regiment after its arrival at Darjeeling in January is of much interest, and when the pamphlet so kindly promised comes to hand I shall read it with much pleasure and profit. In the meantime I have perhaps written too much, and would only add that in all this I find a strong confirmation of my conviction that the etiology of India and its sanitary application to the British soldier can only be established through the medical and clinical reports of the actual observers of disease; and that to attempt it, as is now done, chiefly, if not entirely, by the manipulation of figures can only lead to disappointment, error, and never-ending controversy.

I am, Sir, your obedient servant,

Edinburgh, May 16th, 1871. C. MORHEAD, M.D.

Sealkote, Punjab, E.I., April 12th, 1871.

MY DEAR SIR,—In two recent numbers of THE LANCET you cite the experience of the 58th Regiment in India in support of your position that "stationing, permanently or for continuous periods of two or three years, European troops in the hill climates of India is not calculated to maintain the soldier in the condition which best fits him for the maximum of efficient service with the minimum sacrifice of health and life," &c. As you say, paragraph 64 of the Report of the Sanitary Commissioner with the Government of India for 1869, which purports to detail the experience of the 58th Regiment for that year, affords a "striking confirmation" of the truth of your argument. Of course you could have no reason to doubt the accuracy of the data on which the Sanitary Commissioner founded his assertion, that the admissions and deaths from cholera, fevers, dysentery, and apoplexy "were in the one (the wing from the hills) more than double what they were in the other (the wing from Benares)." But the facts supplied to the Sanitary Commissioner, and published by him in a table at page 21 of his Report for 1869, are utterly and admittedly incorrect. The table in question was compiled by the regimental authorities in a hurry while the regiment was scattered about the country in cholera camps, and at a time when the orderly-room and hospital office establishments were sadly crippled by death and overwork. I enclose a certified copy of the corrected table, which I know has been very carefully prepared, and which tells a very different story from that in the original table published by the Sanitary Commissioner. This corrected table proves that, from January 12th to August 23rd, 1869, the wings suffered from disease in very much the same relative proportion as they did during the longer period embraced between the 12th of January and the 31st of December of the same year. With reference to the latter period, you will find that at page 40 of a Medical History of the 58th Regiment, which I have published, and of which by this mail I send you a copy, I state that "300 men fresh from the hills passed through a very trying year in the plains, and suffered precisely the same in doing so as the 263 so-called seasoned men suffered." I would invite your special attention to pages 41 and 42 of my pamphlet, where the greater prevalence of cholera during the first fortnight of the epidemic in the hill wing is considered and estimated at, as I think, its true value in the making of a sound and reliable comparison of the effect of *climatic* agencies upon the two wings. Pray bear in mind that I do not in any way dissent from your proposition that locating the troops for the hot season on the hills, and bringing them down to "camps of exercise" in the plains during the cold weather, would sanitarily be the preferable course to adopt. I merely want to point out that the real experience of the 58th furnishes no argument whatever against *permanent occupation* of the hill ranges for two or three years at a time.

One other point. In THE LANCET of March 11th you write: "Men exhausted by heat, fatigue, and sickness, moved back to their hill cantonments, would be subject to much mortality and invaliding from these forms of disease, for which the cold and rainy seasons of hill climates are unsuitable." If you will kindly refer to pages 2, 3, and 4 of my pamphlet, you will perceive that the sickly wing of the 58th marched up from Benares to Sinchul, Darjeeling, where they arrived in the beginning of January, 1866, when the ground was covered with snow, and that *the men did not suffer in the least from the sudden change.*

As I presume you will be anxious to give this correction equal publicity to that conferred on the erroneous statements which you have unfortunately and unconsciously been led to disseminate, I had better say at once that you are quite at liberty to make any use you may think fit of this communication. Believe me, my dear Sir, to be yours faithfully,

J. D. AMBROSE, B.A., M.D.,
Assist.-Surgeon, 58th Regt.

Dr. C. Morehead, Edinburgh.

H.M. 58TH REGIMENT.

Corrected Comparative Statement of Sickness and Mortality in the above Regiment since the meeting of the Head-quarters and Right Wing from Darjeeling, the Left Wing from Benares, and the Draft from England, at Allahabad on 12th January, 1869, up to and for 23rd August, 1869.

	Strength.	DISEASES. Cholera. Admitted.	Cholera. Died.	Insolatio. Admitted.	Insolatio. Died.	Fevers. Admitted.	Fevers. Died.	Diarrhœa. Admitted.	Diarrhœa. Died.	Dysentery. Admitted.	Dysentery. Died.	Hepatitis. Admitted.	Hepatitis. Died.	Rheumatism. Admitted.	Rheumatism. Died.	Venereal. Admitted.	Venereal. Died.	Other Diseases. Admitted.	Other Diseases. Died.	Total. Admitted.	Total. Died.
Right wing and head-quarters (from the hills)	300	62	40	6	4	131	3	84	2	26	1	6	...	13	...	66	...	143	3	557	59
Left wing (from Benares) ...	243	28	10	2	1	60	...	43	3	13	...	19	2	13	...	39	...	90	2	307	24
Draft (from England)	86	14	11	2	2	45	2	26	...	4	...	3	...	2	...	24	...	41	...	164	15
Total	729	104	73	10	7	235	5	153	5	43	1	30	2	27	...	146	...	280	5	1028	98
Percentage of above.																					
Right wing	...	15·80	11·79	1·23	1·02	33·68	0·78	21·43	0·51	6·41	0·25	2·05	...	3·07	...	22·05	...	35·66	0·76	142·83	15·12
Left wing	...	11·53	6·58	0·82	0·41	23·04	...	17·28	1·23	5·34	...	7·81	0·82	5·34	...	15·63	...	39·50	0·82	126·33	9·87
Draft	...	14·69	11·48	2·09	2·09	47·00	2·08	27·08	...	4·16	...	3·12	...	2·08	...	25·00	...	42·70	...	170·83	15·62

The difference in the total mortality is the same as the difference between the mortality by cholera in the two wings—that is to say, placing cholera for the present out of the question, the mortality by all the other diseases has been about equal in the two wings from 12th January to 23rd August, 1869. Now, the cholera at the outbreak of the epidemic struck the occupants of No. 8 barrack, Clydesdale lines, with great force, and thus in great measure caused the cholera mortality in the right wing to be excessive during the first fortnight of the epidemic as compared with that of the left. But there is no reason to suppose that if No. 8 barrack had been occupied by a left wing company instead of by one of the right wing, the former would not have suffered just as much as the latter did. Indeed all the subsequent experience during the remaining four and a half months of the epidemic points forcibly to this conclusion, that the greater prevalence of cholera in the right wing at first was a mere accidental occurrence, which was no more attributable to the fact of the men having resided in the hills than the larger amount of venereal disease in the same wing was assignable to the same cause.

As regards the more important climatic diseases, it is right to make a few remarks. At the end of the year the number of admissions on account of fever from each wing became almost equal; while if the mortality in the right wing was greater than that of the left, the invaliding on account of fevers was greater still from the left than it was from the right. Bowel complaints appear to be pretty evenly balanced, whether the admissions and deaths up to the 23rd August, or the admissions, deaths, and invaliding to the end of the year be taken. Hepatitis and rheumatism give results unfavourable to the left wing; and, on the other hand, insolatio prevailed to a greater extent in the right wing, but the total number of admissions (9) for this disease is much too small to admit of a reliable comparison. "Other diseases" show a slight preponderance in favour of the right wing.

An intelligent and unbiassed analysis of this table cannot fail to demonstrate that the wing from the hills maintained quite as good a health standard up to the 23rd August, or up to the end of the year (the latter date, as affording larger numbers for comparison, is preferable), as the so-called "seasoned" wing, which had not been out of the plains at all, did.

(Signed) { A. W. MORRIS, Lieut., Actg. Adjutant, 58th Regt.
C. HOOD, Colonel, Commanding 58th Regt.
E. L. LUNDY, M.D., Surgeon, 58th Regt.

(True copy) O. W. HILL, Adjutant, 58th Regt.

Sealkote, April 13th, 1871.

SANITARY STATE OF GERMANY.

IN confirmation of what we said last week as to the sanitary state of Germany, Dr. Engelmann furnishes satisfactory accounts of Creuznach; while the Bavarian Government, in response to its inquiries, has received full reports on the watering-places at Reichenhall, Rosenheim, Aibling, Tölz, Traunstein, Adelholzen, Empfing, Partenkirchen, Greifenberg, and Kreuth. The contents of these documents are in the highest degree reassuring. No trace of any infectious disease whatever has been detected in the above-named health-resorts, which were spared also during the past winter and autumn.

Mr. D. W. Crompton, (Birmingham.)—The **nesology of the Nose has not stagnated since 1834**, when that subject was prescribed for the Jacksonian Prize. At the same time candidates for the same Prize on the same subject (to be awarded next year) may like to know that Mr. Crompton's successful paper in 1834 is still accessible in the archives of the Royal College of Surgeons.

Dr. E. J. Tilt's letter shall appear next week.

Merritt.—"Nutriment," according to present physiology, has a large meaning, and we do not feel quite clear as to the meaning attributed to it by our correspondent. Much depends on the kind of cheese, and the kind of meat, whether fat or lean, whether wanted for work or for mere tissue-making. But, speaking generally, a pound of cheese contains the most nutriment; at any rate it would supply the material of most force.

J. S., (Canterbury.)—We cannot say how the diploma is obtained, and, to be frank, we care little for it.

Mr. John Scringeour, (Dundee.)—We never recommend medical men. Let our correspondent consult a respectable surgeon in his own neighbourhood on the subject.

F.R.C.S.—Such a qualification cannot legalise medical practice.

THE RECENT SERIOUS CHARGES AT THE LAMBETH POLICE COURT: AN EXPLANATION.

To the Editor of THE LANCET.

SIR,—Having seen a report in last Saturday's *Telegraph* of certain proceedings at Lambeth Police Court with reference to a serious charge preferred against two persons for attempting to procure medicine with intent to cause abortion, and seeing the name of Dr. Duke without an address has caused me some considerable annoyance, I think it right to say I am the only Dr. Duke practising in the suburbs of London, and I am in no way connected with Mr. Benjamin Duke who figures so conspicuously in the case.

The counsel for the prisoners remarking at some length on the mode in which the prosecution has been got up has led me to trouble you with this.

Yours obediently,
STEPHEN DUKE, M.D.

Langton-place, Vassal-road, North Brixton, May 23rd, 1871.

Dr. Mackinder, whom we thank for his enclosures, may like to know that the statements respecting the deaths after vaccination which were said to have occurred in the family of Mr. Horrocks, of Middlesborough, have been carefully investigated, and found to be utterly untrue. The children were vaccinated from a perfectly healthy child of perfectly healthy parents, and there was no reason whatever for believing that vaccination had produced other than the usual effects upon the constitution.

A. B.—We do not give opinions to patients. That is the duty of their medical advisers.

Mr. W. H. Barham will oblige by forwarding the petition on foolscap, in large, clear handwriting, and direct to Dr. Lush.

THE CENSUS OF LONDON.

THE Registrar-General announces the population of London, according to the recent census, as 3,251,804 persons, thus showing an increase since the census of 1861 of 447,915. Not many cities in the world, he truly says, have a population equal to this simple increase in ten years of the metropolis of the British empire. The continued aggregation of human beings to the extent implied in the location of 3½ millions on an area of 122 square miles suggests many serious reflections upon future possibilities into which we need not now enter. Sufficient, perhaps, for the present, that we know London to be, on the whole, a healthy place to live in; at any rate its average mortality is below that of almost any other city in the world, and it is lower than that of probably eight out of ten of our own country towns. In the central parts of the metropolis there is little or no room for expansion, and the effect of public improvements of one sort or another has been to force the population towards the circumference. And in speaking of London we have to remember that the Registrar-General's statement fails to convey an adequate idea of the extent to which the metropolis expanded during the last ten or twenty years. Outside the registration limits there have sprung up numerous tributary towns, whose population is essentially metropolitan, and the growth of these places must therefore be taken into account if we would measure correctly the attractive influence which the metropolis exercises upon our provinces and upon other countries. The materials for this line of investigation are not yet forthcoming. One result of the London census will be gratifying to a class upon whom much cheap sarcasm is frequently expended—namely, the statisticians. The death-rates which the Registrar-General has published for the metropolis ever since the census of 1861 have, of course, had to be based on a population estimated for the several periods, and it is now found that the difference between the estimated and the actual population in 1871 barely exceeds 4000. This may fairly be claimed as a triumph of statistical acumen.

Mr. Walter Chapman, (Tooting.)—A member of the Royal College of Surgeons is quite entitled to engage in general practice.

Dr. John Rose (Chesterfield) is cordially thanked.

REFORM OF OUT-PATIENT DEPARTMENTS AT HOSPITALS.

To the Editor of THE LANCET.

SIR,—In the letter which he addressed to you on May 13th, Dr. Rogers has set forth with fresh force the abuses to which the out-patient departments of our hospitals are subject, and he proposes that an Association should be formed with the view of counteracting them. But I hardly think that such an Association is wanted, and that for this reason.

The Charity Organisation Society—in consequence of a suggestion which I made in a paper which I lately read before the Metropolitan Branch of the British Medical Association—has appointed a Medical Sub-Committee to advise as to the best means of checking the pauperisation which goes on through medical charities. This Sub-Committee has already met several times, and its attention has been particularly turned to the development of Provident Dispensaries and Sick Clubs; but at the same time it is anxious to recommend any measure which may have the effect of discouraging unfit persons from seeking relief at the hospitals. I venture to think that this Sub-Committee is in a better position for accomplishing the end that Dr. Rogers has in view than any professional Association, because it is a mixed body, partly lay and partly medical, and because it is backed by a powerful organisation, which has branches in almost all the districts of London, and which reports progress year by year to a general meeting of its supporters.

For these reasons I deprecate the formation of a new Association; but I would ask my professional brethren to give us their co-operation and assistance. The evils with which we are endeavouring to grapple affect us doubly: they affect us as citizens of a great empire, whose working class is being gradually pauperised; and they affect us as medical men by imposing upon us an unreasonable amount of unpaid labour, and by diverting a large sum of money which ought to find its way into our professional treasury.

At present I am acting as Honorary Secretary of the Medical Sub-Committee, and I shall be glad to bring under its notice any suggestions with which any of your readers may favour me.

I am, Sir, yours faithfully,
Curzon-street, May-fair, May 17th, 1871. WM. FAIRLIE CLARKE.

J. H. W., (Farringdon, Berks.) — 1. Druitt's Surgeon's Vade-Mecum.—2. We do not remember the exact composition; but its inventor would probably supply the information. — 3. Our correspondent does not regularly peruse his LANCET, or he would see that we have replied to this inquiry more than once. Lock the door, open the windows, and leave them so for ten days or a fortnight after the room has been previously disinfected by means of sulphurous acid, chlorine, or some other agent. Boil all linen and other articles capable of being so dealt with, and expose the others to a dry heat of 240° F. in an oven. Either repaper the room or whitewash it, and thoroughly wash all the woodwork &c. with soap and water, or a solution of carbolic acid.

Mr. W. H. Griffiths, (Hinckley.)—He is entitled to no fee.

Ignoramus.—The degrees are given for the most part in the loosest way, and are not respectable. We would advise our correspondent to remain "Ignoramus" as far as they are concerned.

Messrs. Oxley (Liverpool), *Hill* (Street, Somerset), *T. K.* (Chippenham, Wilts), and *Dr. R. Sweeting* (Stratford) are recommended to apply to the Brazilian Embassy, 20, Mansfield-street, London, W.

W. W. W.—We never prescribe. The local practitioner, if unequal to the occasion himself, can surely recommend an expert.

Mr. E. J. Shearman (Rotherham) is thanked.

A Medical Student should consult a medical man. The appearances are probably due to some form of phosphatic urine.

RELUCTANCE OF DISEASED WOMEN TO PROFIT BY HOSPITAL TREATMENT.

OUR statement on the 13th instant that, during the interruption of the periodical examinations under the Contagious Diseases Acts at Dover, any of the numerous syphilitic women might easily have got into hospital without waiting for the resumption of the periodical examination, had they been as willing to undergo treatment as the "Contagious Diseases Interest" alleges, has been impugned by the assertion that there is no hospital in the neighbourhood of Dover where syphilitic women could have been admitted had they applied. If our censor knows anything of the operation of the Acts, he must be well aware that the women are always sent to Chatham for hospital treatment, while the facilities for sending patients thither were not affected by the interruption of the periodical examinations at Dover. The fact remains that 60 prostitutes, the whole number in that town, of whom 15 were infected with syphilis, made no attempt to obtain hospital treatment for their disease.

Mr. H. A. Husband sincerely desires that THE LANCET Bill may pass; but thinks its penal clauses may be made more stringent. If our correspondent will draw out notes of the two cases he refers to, they shall be inserted.

THE MURPHY ANNUITY FUND: A CAUTION.

A WELL-DRESSED young man, representing himself to be the appointed collector to the Murphy Annuity Fund, is soliciting subscriptions from various medical men, and especially at the doors of some of our hospitals. We are, therefore, requested to state that no such collector has been appointed, and that no one is authorised to receive subscriptions but Dr. Arthur Farre, the Treasurer, 12, Hertford-street, May-fair.

M.R.C.S.—It is doubtful whether a man practising under the title mentioned would break the 40th clause of the Medical Act; but he could not enforce payment of bills or legal fees under it.

Equity is, we think, entitled to his fee.

E. M.—The circular in question, advertising the sixth edition, enlarged, of Household Medicine, is not one that should have proceeded from a medical man. There may be a use for Systems of Household Medicine. We believe there is. But that a medical graduate, even of Giessen, should make it the subject of an advertising circular, addressed to chemists and druggists, pointing out to them how the work will be useful in their *business*, is to exhibit an eye to *business* which, in a professional man is, to say the least, unusual. It is a pity, when the profession is so unanimous in disapproving of chemists acting as medical practitioners, that a medical man should be sending circulars, advertising a manual of medical practice, to chemists.

BICHLORIDE OF METHYLENE.

To the Editor of THE LANCET.

SIR,—Allow me to record my testimony in favour of the above. During part of last year I administered it in upwards of one hundred cases at the West of England Eye Infirmary, and have since used it in private practice. I have given it at all ages, from six months to seventy years, and in no case have I had any cause for alarm, although some patients have remained under its influence for upwards of half an hour, vomiting being, as Mr. Spencer Wells observes, exceptional.

The only point I have found necessary to observe in the use of the anæsthetic is, *not to allow the patient to escape from its first influence*. If that be permitted, a stage of excitement and struggling ensues, frequently difficult to subdue.

Do not allow too great an interval to elapse between the first two or three doses, and you will find bichloride of methylene far more manageable than chloroform, and, I believe, less dangerous.—I am, &c.,

F. F. SEARLE, M.R.C.S., F.R.G.S.

Cambridge-gardens, Notting-hill, April 29th, 1871.

BONE-SETTING ON THE CONTINENT.

Dr. A. Joannides describes the doings and manipulations of Regina Dal Cin as he witnessed them in the Ospidale Civico at Triest, where hundreds of medical men and students were waiting to witness her operations. "No case of reduction of the femur has been witnessed by me. Many cases of muscular rigidity of the upper and lower extremities, and more especially of the small articulations, have been either completely and instantaneously cured or partially ameliorated. No attempt has been made in cases of old dislocations with fistulas or scars." Signora Dal Cin is a wonderful manipulator. Her practice extends back nearly forty years, under the guidance of her mother and grandfather. She is about fifty-five years old, and an intelligent-looking woman. Her activity, flexibility, and sensibility of the tips of her fingers, and her habit of incessantly talking to the patient while operating, our correspondent thinks, are the qualities on which her success in manipulating rigid muscles depends.

Mr. T.—"Turpe est doctori quum culpa redarguit ipsum" is the quotation that occurs to us when a denouncer of professional advertising becomes himself an advertiser.

Omega.—The contingency supposed is not probable. The change in the examinations would perhaps be in the direction of more precision, and of more practical and clinical methods of testing.

Mr. T. Pauli.—Their name is legion.

Dr. Collyer writes to us to explain that the term "congestion of the brain," noticed in our article on the History of Anæsthetic Discovery on the 11th of June, 1870, as having been employed by him in 1842, had reference to "nervous congestion," not to arterial congestion of the brain.

Mr. S. M. Bradley (Manchester) is thanked.

ERRATUM.—In our abstract of Dr. Thorowgood's paper read at the Medical Society of London, and published in last week's issue, page 684, second column, line 3, for "Hæmitic" read *Pleuritic*.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Paget, Cambridge; Dr. Rumsey; Dr. Thorowgood; Dr. Letheby; Dr. Garland, Yeovil; Dr. Tilt; Dr. Gayton; Mr. J. Agnew, Liverpool; Mr. Evans; Dr. Jolly, Birmingham; Dr. Hooper, Aylesbury; Mr. Tennant, Fence Houses; Mr. Gordon; Dr. Crompton, Birmingham; Mr. Felce; Dr. Rose, Chesterfield; Mr. Laxton; Dr. Harris; Mr. Baker; Dr. Husband; Dr. Tidy; Mr. Chalmers; Mr. Kirkwood, Cloongoonagil; Mr. Hain, Clive, S. Australia; Mr. Harrison; Dr. Govett, Hamilton, Victoria; Mr. Hill, Street; Dr. Osborn, Southampton; Dr. Woodward, Worcester; Mr. Gray; Mr. Oxley, Liverpool; Dr. Bacon; Dr. Ritchie; Mr. Manby, East Reedham; Mr. A. Wade, Boscastle; Mr. Rowland; Mr. G. Thompson, Wakefield; Dr. Tayler; Dr. Kempster, Battersea; Dr. Gray, Oxford; Mr. Scrimgeour, Dundee; Dr. Heslop, Birmingham; Mr. Evans, Warrington; Dr. Hardie, Manchester; Dr. Mackinder; Dr. Monckton; Dr. Pauli, Aldbro'; Mr. Jupp; Mr. Hickman; Mr. Nutfield; Mr. Crofts; Mr. Houstoun; Mr. Handford; Dr. Thomas, Birmingham; Dr. Hutchinson, Sittingbourne; Mr. Greene; Mr. Smith; Mr. Peck, Oundle; Mr. E. Jones; Mr. W. Graham, Dursley; Dr. Dale, Plymouth; Mr. J. Holding; Mr. Carran, Cloyne; Mr. Atkins; Mr. Little; Mr. Richardson; Mr. Green, Hastings; Mr. Miall; Dr. Lush, Weymouth; Mr. Evans; Mr. Wheatley; Mr. Munro; Mr. J. W. Trotter; Dr. Black, Glasgow; Mr. Bishop; Mr. Breach, Yallendon; Dr. Shearman, Rotherham; Dr. Gale, Leamington; Messrs. Gillon and Co. Leith; Mr. Moore, Birmingham; Dr. Balbirnie, Sheffield; Dr. Curran; Mr. Evers, Bristol; Mr. Eaton; Mr. Watkin, Winchester; Mr. Adams; Mr. Lawton; Dr. Evans, Dublin; Mr. Hyde, Wailly; Mr. Adamson; Mr. Bradley, Manchester; Mr. Walker, Haylen's Island; Mr. Horsfall, Leeds; Dr. Gibbon; Mr. Penton; Mr. White; Mr. Grosse; Mr. P. Jones; Dr. Heaton, Leek; Dr. Burchell; Dr. Sweeting; Mr. Hird; Mr. Baxter; Medicus; M.R.C.S.; The Deaf and Dumb Man, &c.; ——, Melbourne; Ignoramus; Inquirer; A Hospital Physician and Subscriber; Delta; A. B.; &c. &c.

Worcestershire Chronicle, Dublin Freeman's Journal, Brighton Guardian, Dublin Express, Pulman's Weekly News, Epsonian, Southampton Times, Birmingham Daily Post, Shrewsbury Chronicle, Hampshire Advertiser, Yorkshire Post, and *British Press* have been received.

Medical Diary of the Week.

Monday, May 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. John Birkett, "On the Nature and Treatment of New Growths."

Tuesday, May 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Haughton: "Least Action in Nature."

Wednesday, May 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. John Birkett, "On the Nature and Treatment of New Growths."

Thursday, June 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operation2, P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Sound."

Friday, June 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. John Birkett, "On the Nature and Treatment of New Growths."
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Acland, "On National Health."
ROYAL INSTITUTION. — 9 P.M. Prof. Andrews, "On Gaseous and Liquid States of Matter."

Saturday, June 3.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Mr. Lockyer, "On Astronomy."